

MEET ME AT MILWAUKEE

AMERICAN FRUITS

For the Nursery Trade and Allied Interests

Vol. VIII

JUNE 1908

No. 6

MONEY DOES NOT
GROW ON TREES

BUT

THERE IS MONEY
IN GROWING TREES

PROVIDED you start with the right kind of trees

You Can't Go Wrong

If you start with our stock. We have been growing trees so long that it has become a habit with us to grow good trees. When you buy trees from us you get the habit—the good habit—and the better the habit the harder it is to break it. The trees we sell are always good—we don't sell the poor ones. We burn them.



WEeping SILVER-LEAVED LINDEN

An elegant medium-sized tree, 10 to 15 feet tall, of gracefully pendulous habit, that holds its large, silver-lined leaves through the season. Hardy, grows fast and is quite striking.

Did It Ever Occur To You

That great care must be taken in the propagation of trees known as the Weeping type? It occurred to us many, many years ago and by exercising great care we have preserved all the grace, all the beauty and all the hardiness of these splendid trees. Without these qualities these trees are worthless.

Here's trusting that we see you at the convention. In the meantime send for our prices and latest catalogue.

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Our Customers
of these Vital
Requisites: {

HEALTHY,
WELL-GROWN TREES
PURITY OF VARIETY
CAREFUL PACKING

62 Years Under the Same
Management

We grow all kinds and varieties suitable for this
climate, including—

APPLE	ORNAMENTAL TREES
PEAR	and SHRUBS
PLUM	ROSES
CHERRY	CLEMATIS and
PEACH	GREEN-HOUSE PLANTS

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Correspondence solicited.

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600 Castle St. GENEVA, N. Y.

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Shrubs

Evergreens

Roses

Hardy Plants

All the Best and Hardest Varieties.
Largest and most varied Collections in
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Nurserymen—Horticulturists,

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Established 1840.

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Over 450 Acres in Nursery

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Prices on the "J. & P." stock
of Roses, Clematis, Ampelop-
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named varieties), Peonies,
Phlox, and other things.

Fruit Trees and Small
Fruits are grown, too, and sold at Prices that seem in-
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of Big Blocks and Specialties Only that does it.

Jackson & Perkins Company

PURVEYORS TO THE TRADE

Newark, Wayne County, New York State

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American Fruits

Chief International Journal of the Nursery Trade

Entered August 4, 1904, at Rochester, N. Y. Post Office as second-class mail matter

Vol. VIII

ROCHESTER, N. Y., JUNE, 1908

No. 6

PROGRAMME COMPLETE

An Array of Attractive Topics That Will be Discussed by Men of Ability at the
National Convention of the American Association of Nurserymen
at Milwaukee, June 10, 11 and 12.

Wednesday, June 10th, 9:30 o'clock A. M.

Calling to Order,
President J. W. HILL, Des Moines, Iowa.

Address of Welcome,
Mayor D. S. ROSE, Milwaukee, Wis.

Response,
GEO. S. JOSSELYN, Fredonia, N. Y.

President's Annual Address,
J. W. HILL, Des Moines, Iowa.

Announcement of arrangements for selection of
State Vice Presidents and for meeting of Vice
Presidents.

Report of Secretary.

Report of Treasurer.

Reports of Standing Committees:

- Transportation,
F. H. STANNARD, Ottawa, Kan.
- Tariff,
IRVING ROUSE, Rochester, N. Y.
- Legislation,
WM. PITKIN, Rochester, N. Y.
- National Inspection Law,
ORLANDO HARRISON, Berlin, Md.
- Publicity,
J. M. IRVINE, St. Joseph, Mo.
- Exhibits,
THOS. B. MEEHAN, Dreshertown, Pa.
- Editing Report,
J. H. MCFARLAND, Harrisburg, Pa.
- Mutual Fire Insurance,
PETER YOUNGERS, Geneva, Neb.
- Entomology,
C. L. WATROUS, Des Moines, Ia.

Thursday, June 11th, 9 o'clock A. M.

Roll Call of States—Naming Vice Presidents.

Report of Vice Presidents.

Election of Officers.

Selection of Next Place of Meeting.

How can the Nurseryman best Assist in the Civic
Improvement Movement,
J. HORACE MCFARLAND, Harrisburg, Pa.

Is it Good Policy on the part of the Nurserymen
to send out Cheap Lists at the end of the
Season?
J. M. PITKIN, Newark, N. Y.

A few Points on Improvements,
Judge EUGENE STARK, Louisiana, Mo.

The Spraying of Nursery Stock,
PROF. L. R. TAFT, East Lansing, Mich.

Semi-Tropical Thoughts for Nurserymen,
H. H. HUME, Glen St. Mary, Fla.

Friday, June 12th, 9 o'clock A. M.

The Great Southwest,
JNO. S. KERR, Sherman, Tex.

Cost of Growing Stock,
H. L. BIRD, Benton Harbor, Mich.

The Pecan,
H. D. SIMPSON, Vincennes, Ind.

Elements of Success in the Nursery Business,
J. B. PILKINGTON, Portland, Ore.



J. W. HILL
President American Association of Nurserymen

List of Desirable Fruits for my State and are
Recommended to the Planter,

C. M. HOBBS, Bridgeport, Ind.
J. VAN LINDLEY, Pomona, N. C.
GEO. H. WHITING, Yankton, S. D.
C. J. MALOV, Rochester, N. Y.
A. WILLIS, Ottawa, Kan.
E. W. CHATTIN, Winchester, Tenn.
W. F. HEIKES, Huntsville, Ala.
PETER YOUNGERS, Geneva, Neb.
F. A. WEBER, Nursery, Mo.

Report of Committee on Final Resolutions.

The following list of questions has been prepared and will be taken up as the disposition of the program throughout the three day's permits:

Members are requested to avail themselves of gaining information by handing questions to the secretary at any time during the meeting.

In order to give members opportunity for ample social and business intercourse the above program provides for one session daily. It is hoped that this arrangement will result in the attendance of every member at each of the three sessions.

QUESTION BOX

Full and Free Discussion Invited

- Question No. 1—Would it be advisable to have a law for the patenting or trade marking for various varieties of fruits?
- Question No. 2—Does not the average nurseryman import nursery stock that can be grown at home? If so, why?
- Question No. 3—Has any nurseryman succeeded in preventing apple crown gall and hairy root?
- Question No. 4—Is there enough co-operation among nurserymen?
- Question No. 5—Is the demand for ornamentals increasing?
- Question No. 6—What class of nurserymen are able to manage a business and make a profit under present conditions?
- Question No. 7—How should pecans be graded?
- Question No. 8—Are the large orchardists still getting the benefit of the wholesale prices?
- Question No. 9—Are foreign houses careful enough in grading and sorting seedlings?
- Question No. 10—The need of a better class of labor and how can we get it?
- Question No. 11—Why should growing Nursery Stock be taxed as personal property any more than wheat, corn, etc.?
- Question No. 12—Could not the apple orchard interests be greatly improved by more stringent laws regarding the labeling of pure apple cider vinegar?
- Question No. 13—Is the Kieffer Pear responsible for the limited sale of pear trees at the present time?
- Question No. 14—How can the retail nurseryman, who is doing business through agents best conduct this branch of the business?

Badges will be delivered to members by the secretary on registration at the convention.

Ladies in attendance will be supplied with badges on application to the secretary.

Announcement will be made during the first session of the time and place for meetings of the various Protective Associations, if information is placed in the hands of the secretary.

(Continued on page 24)

Here's the Cure

We Print American Fruits

*Here's what one prominent
Nurseryman says:*

Huntsville, Ala., May 5, 1908

American Fruits Pub. Co.,
Rochester, N. Y.

Gentlemen—We are in receipt of the current issue of your paper, and we wish to compliment you on the way the advertisements have been set up. Those throughout the entire paper have a neatness which shows they have passed through careful and efficient hands, but we are particularly pleased with our own.

Yours very truly,

FRASER NURSERY CO.

James W. Fraser,
Vice-Pres. & Treas.

☞ Josh Billings said, "All things come to him who waits; but the feller that goes after things gets 'em quicker." ☞ There is no better way to go after business than by the use of good stationery and printing. ☞ We furnish good stationery and do good printing. ☞ We have special facilities for doing printing for the nursery trade. ☞ Let us quote you prices on letter-heads, bill-heads, mail cards, folders, circulars, booklets, catalogues. ☞ We not only print but design, having capable artists to look after this important part of the business. ☞ No job too small; no contract too large. ☞ It does not matter how far away you may be we can handle your business quicker, better and more satisfactory than others.

**Union and
Advertiser Co.**

**Printers,
Publishers, Engravers**

**22 Exchange Street
ROCHESTER, N. Y., U. S. A.**

For Dull Trade

Do You Favor a National Inspection Law?

(These resolutions were adopted at the sixth annual meeting of the American Association of Horticultural Inspectors and twentieth annual meeting of the Association of Economic Entomologists held at Chicago December 27-28, 1907. They were agreed upon by President J. W. Hill, Orlando Harrison, C. L. Watrous and Professor John Craig, representing the American Association of Nurserymen; Professor Wilmon Newell, representing the Association of Economic Entomologists; Dr. S. A. Forbes, representing the American Association of Horticultural Inspectors.)

Resolved: (A) That the Secretary of Agriculture should be empowered to make regulations governing importations liable to harbor insect pests or plant diseases, such importations to be accompanied by the certificate of a duly accredited entomologist of the country in which said shipments originate, or in the absence of such certificate to make inspection of such shipments by competent agents at the point of destination.

(B) That all state or territorial officials in charge of nursery inspection be urged to accept the certificates at their full value, and that in states where laws are now in force which will not allow the acceptance of such certificates that the inspection departments be requested to endeavor to secure such state legislation as will make this possible.

(C) That Congress should authorize the Secretary of Agriculture to proceed to exterminate or control imported insect or plant disease or any insect previously native to a restricted locality but which may become migratory and threaten the whole country whenever in his judgment such action is practicable and that an appropriation be made for this purpose as a reserve fund for emergency use against any such pest which may arise.

(D) That the joint committee propose to have two bills prepared for introduction in Congress, one of those embracing the subject matter of sections A and B of this resolution and the other embracing only the subject matter of section C of this resolution and that if the passage of both measures be found impracticable then all efforts be concentrated in the attempt to secure passage of the bill involving the certification and inspection of imports and the control of nursery stock shipments entering into interstate trade as above outlined.

Editor AMERICAN FRUITS:

"Dear Sir—From the fact I have had nothing to say in your paper on a National Inspection Law does not mean that I have been asleep.

"It was useless to introduce a bill in Congress that would have sufficient opposition to be defeated; I learned that and simply paused. A house divided against itself cannot stand. I have saved our ammunition until we can better agree and determine more definitely what is wanted and thought it useless to pay out good money to go to Washington.

"I have the assurance from the United States Senators and Congressmen that they are ready to help, but the whole matter should be well defined before being presented.

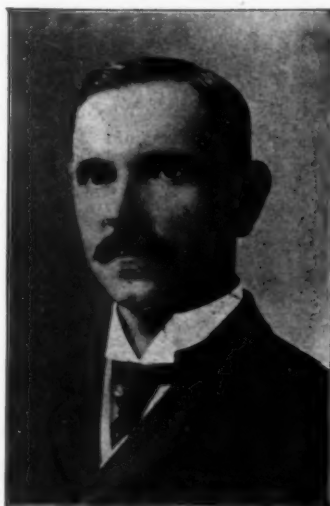
"Now that the Entomologists, Inspectors and Nurserymen have passed resolutions favoring uniformity I hope that we can decide on a bill that will meet the requirements of all concerned. This is no little subject and is too far important to be rushed into a law that may be found a detriment to the Nurserymen and some difficulty may be experienced before it could be repealed.

"Let us think well and act wisely. I would like to get a better expression from the Nurserymen, Entomologists and Inspectors, and have sent the following letter to each member of the Nurserymen's Association and the Entomologists and Inspectors. I hope to have a summary of their replies to consult in preparing a bill. So let us all attend the convention and see if we cannot improve our conditions.

ORLANDO HARRISON,
Chairman Committee National Inspection.

BERLIN, Md., May 12, 1908.

I propose to prepare a bill on National Inspection, and submit same to the nur-



ORLANDO HARRISON
Chairman, Committee National Inspection Law

serymen at our annual meeting at Milwaukee, June 10th, and as the Entomologists, Inspectors and Nurserymen have passed resolutions favoring such a bill, I am asking for expressions from these bodies, as to what particular points they consider should be embodied in the bill.

I appeal to you again as one who is interested in this important matter to the Association to write me by return mail just what your views are and what particular points have you to suggest after going through another shipping season?

I want a prompt reply to the following questions. Your name will not be used.

Do you favor a National Uniform Law? If so, state what you consider is to be gained.

Do you object to a National Uniform Law? If so, why?

Please find enclosed stamped envelope for a prompt reply.

Yours very truly,

ORLANDO HARRISON,
Chairman Com. National Inspection]Law

Are Chestnut Trees Doomed?

(The "Post Express," Rochester, N. Y.)

The New York "Times" says that many thousand beautiful chestnut trees are dying in the metropolis and vicinity, of the most deadly plant parasite known, the chestnut canker, (*Diaporthe parasitica* Murrill), for which there is no known remedy. In one Brooklyn park 1,400 trees have died. In the New York Botanical Garden where careful investigations of the destructive fungi have been made, 300 trees have been lost. The assistant director of the New York Botanical Garden, Dr. William A. Murrill, believes a law should be passed preventing the sending of the infected chestnut to other parts of the United States and he has already warned other countries, Italy in particular, where the chestnut is an important article of commerce and food supply, against importing our chestnut in any form for fear of infection. The truth of an assertion of an expert in the Department of Agriculture at Washington that the trees may be saved by cutting away the affected parts and spraying the rest, is denied at the Botanical Garden, where they say that this treatment can only be given at great expense and then that it is absolutely to no purpose. Dr. Murrill says:

"This chestnut canker, which is a fungus growth, works under the bark of the trees. The spores from the fungi are formed in the fall and disseminated in the spring, not by millions, but by billions. Everywhere there is a crack in the bark of the tree, made by the wind or by the claws of a squirrel, these spores are deposited, and the work of destruction begins. We at first thought that cutting away the affected part and covering with coal tar might be successful, but we find that it was not. A tree sometimes takes the disease in twenty places at once, and

(Continued on page 26)

Burr's Specialties for the Coming Season Burr's

Peach Trees { In carload lots. Many Varieties and the Finest Grown.

Berberry Thunbergii
(Mostly 18 in.—24 in. Grade)

Berberry Seedlings
(6 to 10 inches)

Carolina Poplars
(8 to 10 feet)

Spirea Van Houttei

Hydrangea, P. G.

Syringa Com.

Weigelas, 2 to 3 feet

WE WILL MAKE ATTRACTIVE PRICES
ON EARLY ORDERS

C. R. BURR & COMPANY

The Burr Nurseries, Manchester, Conn.

We Are Ready Whenever You Are

We are ready to make prices on Apple Seedlings—if you are ready to place your order. We would also like to make you quotations on Kieffer Pears—two year olds—fine, clean, healthy trees, well branched on French branched roots. They cannot be beat in quality or price.

We sold 11,000,000 Apple Seedlings the past season to satisfied customers.

F. W. Watson & Co.

TOPEKA, KANS.

Bridgeport Nurseries

*Can furnish you with
all kinds of*

**Fruit and Ornamental
Stock**

For Fall 1908 and Spring 1909

Included in above are 100,000 Cherry, 2 year old.

Correspondence and Inspection Invited

C. M. Hobbs & Sons

SUCCESSORS TO

Albertson & Hobbs
BRIDGEPORT, IND.

ESTABLISHED 1845

Bryant's Nurseries

Princeton, Ill.

We offer for Fall an exceptionally large stock of forest seedlings in

Box Elder, American White Elm,

Catalpa Speciosa,

Black Walnut and Soft Maple,

Russian Mulberry

Also

Altheas, named kinds, Siberian Dogwood,

Barberry Thunbergii, Persian Lilac,

Spirea Van Houttii,

Purple Lilac, Syringas, Snowball, etc.

PEONIES

Fall is the time to plant them. We have 50,000 plants to offer. Special inducements for early orders.

Arthur Bryant & Son

PRINCETON, ILL.

Treatment of Damping-Off in Coniferous Seedlings

(RECENT BULLETIN OF FORESTRY SERVICE)



J. H. DAYTON, of Ohio

Member of Executive Committee, American Association

Experiments have been carried on by the writer for several years in testing the effect of various chemicals upon the damping-off diseases of tender coniferous seedlings. These troubles are great obstacles to the successful production of such seedlings in large numbers for use in replanting waste or unoccupied land. They are caused by a number of different fungi which are being studied and will shortly be described.

The results of the first experiments, which were carried on entirely in the greenhouse, were taken as indications of what might be expected in actual nursery practice. It was felt, however, that the work should be extended to field conditions, and upon testing the preliminary results there it was found that they could be taken only as very meager and insufficient indications of the results to be obtained in the field.

During the season of 1907, field experiments were conducted in several nurseries of the New York Forest, Fish, and Game Commission (one of which is operated in co-operation with the Forest Service of the United States Department of Agriculture) and of the Vermont State Forestry Commission, located, respectively, at Saranac Inn, N. Y., and Burlington, Vt. These experiments yielded very interesting results, but because of their preliminary nature it is felt that without further very rigid tests along similar lines they can not be accepted as furnishing conclusive proof of the comparative value of the chemicals used.

The great interest centering about these diseases, however, makes of value every

scrap of practical information concerning methods of prevention. Until conclusive results are obtained the present ones may therefore prove useful to nurserymen, but they should be accepted with the distinct understanding that they are preliminary and are subject to later modification.

The tests here outlined are being continued on a more extensive scale, and it is hoped that the present season's work will give such results that there can be no doubt as to the conclusions to be drawn from them.

Procedure in Experiments.

The plots used were located in seed beds 12 feet long and 4 feet wide, each bed being divided into three equal parts 4 feet square. The chemicals were used in fine powders or in solutions, according to their original form and nature. The solutions were applied with an ordinary sprinkling can, while the powders were sifted on the beds with a very simple form of duster having a perforated bottom, through which the powder was shaken. The solutions were applied to the soil before the seeds were sown, and then again about



H. B. CHASE, of Alabama

Member of Executive Committee, American Association

five days after the seedlings had come up. The powders were applied to the beds only after the seedlings had been up for three or four days. They were applied in very light coatings, which were renewed promptly after each rain. This renewal is not necessary except for a period of about two weeks, beginning three or four days after germination, when the seedlings are most susceptible to the attacks of the damping-off fungi.

Powders Used.

Sulphur.—Sulphur was obtained in three forms: Washed, resublimed, and precipitated. Favorable results were given by all, but the first led the others slightly. It was noted, too, that a distinct odor of sulphur could be detected at least 8 inches above the surface of the plot treated with washed sulphur, while no perceptible odor could be detected over the other two at a greater distance above the surface than 1 or 2 inches. This difference was marked several days after the sulphur had

been applied as it was immediately after the application was made.

Dry Bordeaux Mixture.—Dry Bordeaux mixture made according to Scott's formula^a was also tried, but the method of preparation is too tedious and time consuming to be of use in the case of a disease like damping-off unless the mixture is made up some time in advance. It is seldom practicable for the nurseryman to give the necessary time for its preparation, owing to the pressure of other duties at this period of the year. This powder was accordingly discarded for a copper sulphate and lime mixture which is easily and quickly made up as required and apparently should give as good results as the Bordeaux preparation.

Copper Sulphate and Lime.—Powdered sulphate of copper was mixed with powdered lime, at the rate of 1 pound of the former to 10 pounds of the latter, in the following way: Fresh stone lime was slaked with as little water as would keep the slaking in progress. In this way slaked lime was obtained in the form of a fine powder. This was screened and very thoroughly mixed with the powdered copper sulphate, and was then ready to be used. Attention is called to the need of thoroughly mixing the two ingredients, as disastrous results are likely to ensue if the copper sulphate is not properly diluted with the lime.

This mixture was used very freely after the seedlings had come up. Absolutely no injurious results could be noted, even when the applications were made early in the morning while the seedlings were still wet with dew so that the powder stuck to them. It may be said that the better time to apply the powders and also the solutions is late in the afternoon. The powders will then adhere very slightly to the plantlets and practically all of the powder will fall on the soil, where it is wanted.

This copper and lime mixture was used upon the following species: *Pinus sylvestris*, *P. ponderosa*, *P. strobus*, *P. resinosa*, *Picea rubens*, *P. excelsa*, and *Pseudotsuga taxifolia*. Very good results were obtained in checking the damping-off with it,

(Continued on page 26)



E. M. SHERMAN, of Iowa

Member of Executive Committee, American Association

a—Waite, M. B. Fungicides, U. S. Department of Agriculture, Farmers' Bulletin 243, pp. 11-12, 1906.

b—Kraemer, Henry. Dilute Sulphuric Acid as a Fungicide. Proceedings, American Philosophical Society, vol. 45, pp. 157-163, 1906.

FOR FALL 1908 AND SPRING 1909

*We wish to call attention
to our offerings of*

PEACH—One Year and June Buds. We invite inquiries NOW from buyers of June Budded peach, plum and apricot. We will bud especially to suit **your** particular wants.

PLUM—De Soto, Wyant and Japanese varieties.

PEAR, CHERRY and QUINCE—As usual.

MULBERRY—A splendid assortment, in quantity.

PRIVET—California and (true) Amoor River.

ROSES—Leading Hybrid Perpetuals, also Hardy Climbers.

MAGNOLIA—Grandiflora. **SPIREA**—Van Houttei. **ALTHEAS**.

Fraser Nursery Company, Inc.
HUNTSVILLE, ALA.

The Willadean Nurseries

OFFER FOR SPRING 1908

A good assortment of Fruit, Shade, and Ornamental Trees, Shrubs, Roses, Evergreens, Herbaceous Plants, Tree Seedlings, and Small Shrubs for transplanting.

Special prices quoted on Snowballs, Spirea Van Houttii, Berberies Vulgaris, and Purpurea, also other Shrubs, 2 to 6 feet. Write for prices.

The DONALDSON COMPANY
Warsaw, Kentucky

B=BURNS CITY NURSERIES=B

U **Burns City, Ind.** U

R Offer for the season of 1908 R
N and 1909 N
S S

C **Peach**—In carload lots, all grades. C

I **Apple**—Two-year, fine trees, 5-8 I
T and up. T

Y **Pear**—Mostly Kieffer and Garber 3-4 Y
and up.

N **Soft Maple**—8 to 10 and 10 to 12 N
U feet. U

R Special low price will be made R
S on peach in car lots. S
E
R

I **F. B. Garrett** I
E **BURNS CITY, IND.** E
S S

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34th YEAR

PAN HANDLE NURSERIES

For Fall of 1908

We offer a complete line of Nursery Stock consisting of

Apple	Ornamental Trees
Pear, Standard	Shrubs
Pear, Dwarf	Vines
Plum on Plum	Roses
Plum on Peach	Evergreens
Cherry	California Privet
Peach	Weeping Trees
Currant	Catalpa Speciosa Seedlings
Raspberry	Black Locust Seedlings
Blackberry	Catalpa Speciosa

Seed Crop 1908

We have the trees if you have the price. It's not high, ask us about it. We are always willing and anxious to make quotations, take your order and set it aside for shipment as you may direct.

Dealers complete list of wants a specialty

Packing and other facilities unexcelled

J. K. HENBY & SON
Greenfield, Ind.

The Monroe Nursery

I. E. Ilgenfritz' Sons Co.

MONROE, MICH.



Sixty Years
in the
Business

Offer a
General
Line of

CHOICE NURSERY STOCK

Finest Stock of
Peach in America

Std. Pear, Plum, Cherry, Etc.

Correspondence Solicited

I. E. ILGENFRITZ' SONS CO.
Monroe, Mich.

Minnesota Nursery Stock

Complete assortment of Fruit and Ornamental stock in all varieties suited to Northern Culture. A specialty of Hardy Shade Trees, Wind Break Stock, Evergreens (Coniferous), Deciduous Shrubs, Apples and Native Plums.

1200 Acres of the Best
Mississippi Valley Soil

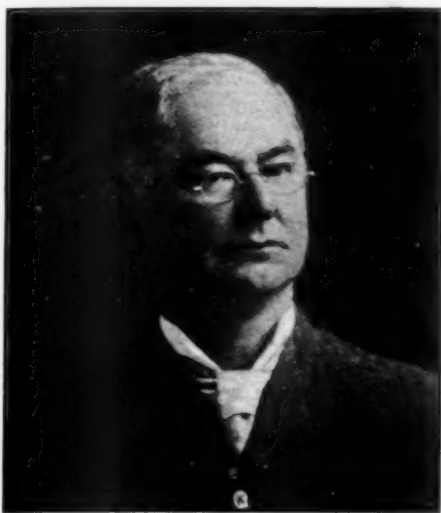
The Jewell Nursery Co.

Established 1868

LAKE CITY, MINN.

SHADE TREES FOR STREET PLANTING

By JOHN DUNBAR, Assistant Superintendent of Parks, Rochester, N. Y.



D. M. HOBBS

Vice-President from Indiana and also of the American Association.

Any city or village where the residential streets are planted with a good assortment of shade trees at regular and proper distances apart, and all in generally good health, has a valuable asset that it may well be proud of. Unfortunately, however, that is a rare occurrence. In nearly all cases the planting of street trees in cities in their formative stages is at the will and caprice of the property owners, and each one plants or not just as the impulse strikes him, and if he does plant, he is likely to select something entirely unsuitable, or plant too thickly, and if nine-tenths of the population do likewise the results are sure to be unsatisfactory, incongruous and haphazard, and the street trees in many American cities present such appearances to-day.

In this country and Europe the cities with the best planted streets are those where the planting and care of street trees are under municipal control. The best example of municipal management in street planting in this country is Washington, D. C. For a great many years the absolute control of street tree planting has been vested in a commission and the results have been excellent in intelligently planted and uniform effects in the planting of streets and avenues. In some American cities where the control and planting of street trees has lately been placed under the management of the board of park commissioners, considerable difficulty has been experienced in thinning out trees where they have been planted too thickly.

Property owners are frequently opposed to the thinning out of trees under any circumstances, and much diplomacy and reasonable arguments have to be used to show them the benefits and utility of trees at proper distances apart.

In the planting of new streets the property owners will often request trees to be planted absurdly close together, with the suggestion that they be thinned out in the near future. The thinning out of trees when they become crowded is too often a fond delusion, as it frequently is not carried out, and it is far better policy to

plant at the proper distances to begin with. It is a wise policy where municipal authorities have the control and planting of street trees, not to proceed too arbitrarily with the powers which the law confers upon them, but to lay the benefits and improvement to be desired from new and better methods, before the people and secure their co-operation.

In the selection of trees for streets and avenues, young thrifty subjects, with good stocky bodies, from 8 to 12 feet in height, according to the kind selected; with good root systems, and which have been grown in nurseries, are always preferable to trees picked up from wild copses.

A hole for a tree should be at least six feet in circumference and two feet deep, even if it has to be partially filled up again to allow the tree to sit at the proper depth. If the dirt is gravelly and sterile it should be removed and replaced with good soil, that is to say, any loamy soil that will grow good potatoes or corn. This may be trite advice to many people, but judging by the slovenly and careless methods quite

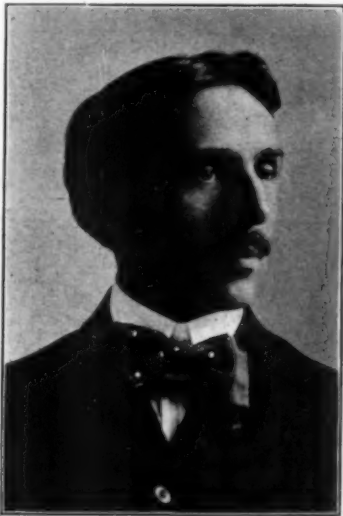
prevent a large amount of rainfall from penetrating the soil; the air is more or less impregnated with smoke, gases and dirt; the large areas of brick and stone reflect and distribute arid, dry heat; and the stems are frequently gnawed by horses and mutilated by boys, excepting of course those cities where ordinances protecting trees are rigidly enforced. A good street tree should be able to make a good living, against a hard struggle, and look well on a scanty diet.

Large growing trees on streets should not be planted closer together than fifty feet apart, and second sized trees thirty-five to forty feet apart. When trees attain full size and maturity it is important that they are sufficiently far apart to allow sunshine to reach the ground between them, for the drying up of moisture, and to permit free circulation of air. As a matter of fact the number of trees adapted to street planting are not large. Experience in American and European cities has shown pretty conclusively what may be used in most of our cities with any degree of success. We will consider the best trees in the order of merit for this purpose.

The American Elm is the leading tree for street planting. It seems to stand well in areas where smoke is abundant. Being one of our largest trees with wide branching habit it is well adapted to wide streets. It thrives remarkably well where there is clay subsoil.

The English Elm is about the best foreign tree we have, and has done remarkably well in the streets of many cities. The branching habit is upright, or about an angle of forty-five degrees, and is excellent for street purposes. It grows to a large size in time, and may be classed among the large-sized trees, but on account of its habit of growth it is well adapted to intermediate streets.

The Oriental Plane Tree, or Buttonwood, has demonstrated its usefulness as an available street tree. It stands remarkably well in smoky conditions, and grows freely under circumstances that



HERBERT CHASE

common in tree planting, it cannot be too often reiterated.

In the training and pruning of a street tree it is always important to bear in mind that the ideal tree for a street, should have one central shaft or main trunk to which all the side branches are subordinated. It is true that a great many trees do not grow this way naturally, but observation shows that a large number of trees which branch off into a number of large limbs or equal subdivisions a short distance above the ground, are frequently smashed in violent storms. When grown to one main stem and the branches subordinated by careful pruning serious injury from storms rarely occurs. It is a great mistake to mix up trees on streets. Only one kind of tree should be used on a street. The beauty and utility of this arrangement is self-evident to every one who has seen it.

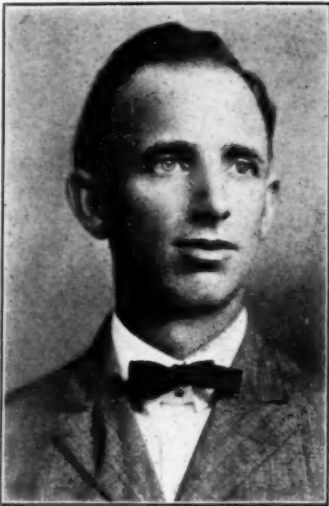
Trees on city streets are subject to conditions which are exceedingly difficult to contend with in maintaining a healthy existence. The paved or asphalted streets



T. J. FERGUSON

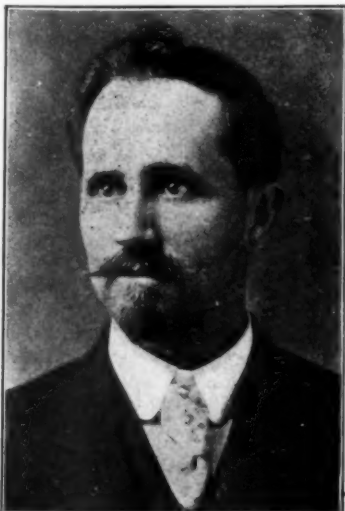
Member of Committee on Mutual Fire Insurance from Wisconsin.

(Continued on page 22)



S. W. CROWELL
Vice-President from Mississippi.

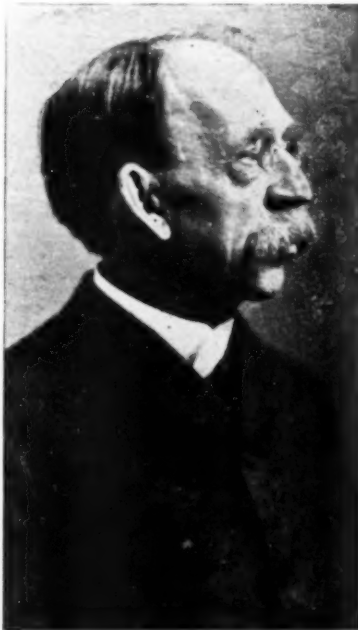
and customer has his own separate card. This means that cards for old customers can be removed, that filled up cards may be taken out and replaced by new ones for continuing the record with especially active customers; that cards for new customers can be inserted at any point without confusing the arrangement; that there are no space limits of any kind; that cards can be added indefinitely. Second, that cards may be arranged in the manner in which will prove the most convenient for your own peculiar requirements. It may be that you would want to divide these cards by territories, so that each correspondent would have his own card cabinet. He could then arrange the cards by states or by individuals' names alphabetically. Most small nurseries keep the cards in one cabinet arranged by states. This method has a great many advantages. Behind the index guide for each state the cards are first arranged in towns, then the cards for all customers in certain towns are arranged alphabetically by names. Nothing could be more convenient for quick reference in the office. The cabinet allows you to tell at a glance just how many customers you have in any particular locality. By referring to the map and ascertaining the names of adjacent towns, you have almost without a moment's delay, a complete list of all your customers in any part of the state.



F. W. POWELL
Vice-President from California.

Then there is the tab feature to denote orders for Spring and Fall shipment, etc. It has previously been necessary for nurserymen to keep separate lists of their shipments, which necessitates double writing and double work all around. With this card system, when the nurseryman desires to segregate all Fall orders for direct shipment to customers, for example, he has but to refer to his card system, and remove therefrom every card bearing a tab printed "Fall Direct". These tabs stand out in plain sight, and all tabs so printed are in exact alignment with one another from front to back of the drawer. After the cards have been removed from the file and the necessary steps taken to issue orders for the shipments, they are either returned or placed in a separate card drawer, labeled "Filled Orders" but arranged geographically by states and towns, as previously described.

Here is another card form used by a nurseryman for keeping similar records. This is more especially adapted to the



MAJOR EDWARDS H. PRATT
Member of American Association who Died at Fredonia,
N. Y., March 31st. Mr. Pratt was President
of the T. S. Hubbard Co.

keeping of records with deliverymen, and with the larger nurseries is used in connection with the system described above.

There is always one great disadvantage about describing these systems in writing. Every nursery is working under its own peculiar conditions and while a record-keeping system may be suitable for use by all the different classes of nurseries, it can never be used individually by them

Name		
Post Office		
County	State	
Shipping Station, if different from the P. O.		
ROUTE	SENT TO NURSERY	RETURNED
AMOUNT OF BILL	C. O. D.	DATE PAID
Returned		
Remarks		

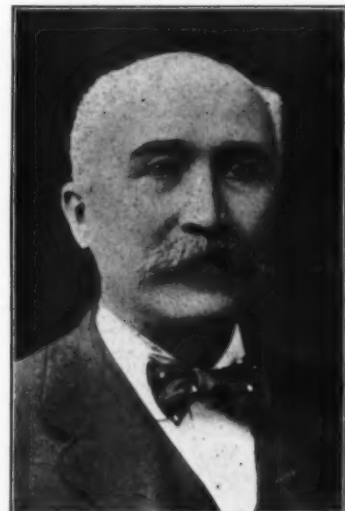
without special adaptation to their requirements. We haven't space to describe more than these two card forms, though



J. VAN LINDSAY
Vice-President from North Carolina.

there are hundreds of forms for other purposes in use. Moreover, new uses for the card system are springing up every day, and nurserymen can profitably lend an open ear to any argument in favor of its adoption in their business. If you are not taking advantage of the card system, you are giving your competitors an opportunity to get ahead of you by handicapping yourself with methods of yesterday. Every individual nurseryman can do all of his fellow nurserymen, and primarily himself, a great service by taking up the card system if only in the way of experiment. It is proverbial that nurserymen are inclined to get off the main line of modern business practice, as they are not brought much in direct contact with other businesses, dealing as they do with rural communities for the most part. This is no reason, however, why they should not take full advantage of all modern appliances for the improvement of their working organizations.

Any correspondence addressed to Yawman & Erbe in reference to the above article will receive prompt and courteous consideration. Mention AMERICAN FRUITS and you will get an answer by return mail. Sample cards may be obtained at the convention from the Editor of AMERICAN FRUITS.—Editor.



C. A. ILGENFRITZ
Vice-President from Michigan.

THE SEEDLESS APPLE IN CANADA

By W. T. Maconn, Horticulturist, Central Experimental Farm, Ottawa, Ont.



C. R. BURR
Vice-President from Connecticut

During the past three years considerable interest has been aroused in Canada in regard to seedless apples, and during 1906 a company was formed in Toronto to push the sale of one variety, the "Spencer Seedless." In view of this fact it seems desirable to publish in this Annual Report what we know in regard to seedless apples in Canada, and the "Spencer Seedless" in particular.

The seedless apple is not a new thing, having been recorded by writers several hundred years ago. There are in Canada at the present time several varieties of seedless apples which originated in this country. A seedless apple was exhibited at the annual meeting of the Ontario Fruit Growers' Association, held at Brantford, Ont., on December 19, 1900. The following reference is made to it in the report of the Fruit Exhibit Committee, of which the writer was chairman:

"A curiosity in the form of a seedless apple was shown by Mr. A. W. Whitney, Iroquois, Ont. The apple was quite normal in outward appearance and of good size. Mr. Whitney says that none of the apples contain seeds."

This tree was reported by the owner, Mr. L. Cameron, Iroquois, Ont., to be both seedless and bloomless. Through Mr. A. D. Harkness, Irena, Ont., I obtained specimens of the flowers and on May 26, 1904, several clusters were received from him and the following description was made of them:

"Apetalous apple blossoms, received from Mr. A. D. Harkness, Irena, Ont., from tree grown by Mr. L. Cameron, Iroquois, Ont. About one dozen flowers received May 26th. Flowers in clusters averaging three flowers in each, calyx apparently very similar (these were not compared with the calyx of perfect flowers at the time) to that of ordinary flowers. Petals abortive, very small and hidden by the sepals. Flowers evidently all pistillate. Appear to be fifteen stigmas to each flower." We visited Iroquois in August, 1904, and went to see the seedless apple tree which is in the garden or small orchard of Mr. Cameron. The tree was found in a very thrifty condition but with not a fruit

on it. This lack of fruit was explained to my satisfaction by the fact that there were practically no apples in the orchard that year, hence the pistillate flowers could not be pollinated. Mr. Cameron informed me that it was a seedling tree about 10 years old and probably fruited for the first time in 1900, when the fruit was shown in Brantford. Mr. Cameron has this seedless apple top grafted on another variety in addition to the original tree. Buds were obtained from Mr. Cameron and trees of this variety are now growing at the Central Experimental Farm. Efforts have been made to obtain fruit of the apple since that time, but without success.

In April, 1904, the following item appeared in the Prince Edward Island Farmer: "In a recent issue of the Farmer we published the result of an experiment in apple growing by which a noted Colorado orchardist, after seven years of experimenting, had succeeded in producing a seedless apple (The Spencer Seedless). It was noted that the tree bearing this scien-

varieties, the cartilagenous parts of the core, or carpels, were not as thick as in the varieties with seeds. There were no seeds in the specimen examined. I have tried to obtain fruit of this apple since, but without success.

When attending the annual meeting of the Prince Edward Island Fruit Growers' Association on December 20 and 21, 1904, a specimen was shown me of a seedless apple grown by Jesse A. Wright, North Bedeque, P. E. I. This apple was past best condition, but was seedless with a small core confined to the calyx end of the apple.

At the Flower, Fruit and Honey Show held in Toronto on November 6-10, 1906, a number of the Spencer Seedless apples were exhibited and agents were in attendance taking orders for trees of this fruit. The Spencer Seedless apple is said to have originated with Mr. J. F. Spencer, Grand Junction, Col., U. S. A., but it is believed by good authorities to have originated in Virginia as a chance seedling.

As trees of the Spencer Seedless apple were being offered at \$2.50 per tree those attending the Ontario Fruit Growers' Association thought it would be in the interests of Canadian fruit growers to have an unbiased judgment on the merits of this fruit, hence a committee was appointed consisting of H. H. Groff, Simeoe, Chairman; D. Johnston, Forest; E. Morris, Fonhill; W. H. Dempsey, Trenton; and W. T. Maconn, Ottawa. This Committee reported as follows:

"We secured specimens from the exhibit at Massey Hall, which showed the following objectionable characteristics in apparent contradiction to the printed description. Although the core is smaller and less distinct than in the average apple, there is still sufficient to make the process of coring a necessity. The practical absence of the calyx tube leaves an abnormally large and deep opening reaching to the core, thereby involving loss of flesh nearly equal to a normal core, as well as affording a harbor for injurious insect pests. The specimens examined by us showed this space to contain an objection-

(Continued on page 22)



A. M. FERGUSON
Vice-President from Colorado

tific wonder bears no blossoms and that the fruit resembles a navel orange. Last Saturday, to our surprise and pleasure, we received a box of seedless apples grown last year in the orchard of Mr. Hugh Ramsay, Port Hill, P. E. I., with the explanation that similar apples had been grown yearly on the same tree during the past thirty years. Examination shows that the apple is entirely solid, there are no seed chambers, nor any semblance of seed: it is well formed, richly flavored, and a good winter keeper, the samples received being firm and fresh although stored in ordinary barrels. The tree bearing this peculiar variety was full grown and bearing heavily when Mr. Ramsay came into possession of his farm thirty years ago."

After this article appeared we wrote to the Editor, and also to the owner of the fruit, asking for specimens, but unfortunately the best were gone, the specimen received being small and the quality, judging by the fruit tested, not more than medium. The core was small and was situated nearer the calyx than in ordinary



JOHN S. KERR, of Texas
Who will Address the Convention on "The Great Southwest"

AMERICAN FRUITS

An international monthly Nursery Trade Journal, circulating throughout the United States and Canada and in foreign countries, covering every branch of the industry. A Business Journal for Business Men.

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Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to date of publication.

Drafts on New York, or postal orders, instead of checks, are requested.

Correspondence from all points and articles of all kinds, of interest to the Nursery Trade, and allied topics are solicited.

Rochester, N. Y., June, 1908.

THE MONTHLY SERMON

Here's hoping that you have the time of your life at the convention. We be there and have space reserved for an exhibit. Don't fail to come and see us as we are going to give to each delegate a copy of our new pocket directory with our compliments. It will be our souvenir of the occasion. The directory will be from the press about June 1st. It will contain the names of all nurserymen who have at sometime patronized AMERICAN FRUITS. We do not claim that it will be complete, in that it contains the names of every nurseryman in the United States; but we do claim it is authentic and that it has been prepared with care. The price of the directory is one dollar. It will be sent free to new subscribers or those old subscribers who renew their subscriptions. We are going to issue a revised and enlarged edition at a later date. This enlarged edition will be sent free to those who purchase one of the present issue or secure one at this time by subscription to AMERICAN FRUITS. If you are a nurseryman send us your name and address and we will send you a directory for inspection and enclose stamped envelope for its return. If it isn't worth what we ask send it back. Take us at our word. It costs you nothing.

THE CONVENTION NUMBER

This is the convention number. Within the covers of this magazine you will find articles of many sources on as many subjects. We have made our selection with an eye on the convention. All the subjects treated in this issue will be considered at the convention. A glance at the program will convince you. We could go on and enumerate the articles but do not care to take up your time. We want you to read the articles. Put this issue in your grip when you leave for the convention and read it on the train. It will fortify you for discussion when it comes your turn to appear on the floor of the convention.

A word to those who are not members of the American Association. Read the contents of this number carefully and then see what you will miss by not going to the convention. You will miss hearing the brainiest men in the trade discuss questions of vital interest to the business; you will lose the opportunity of asking questions and getting answers that

might mean money in your pocket. You are missing in value to your welfare in a business sense ten times the cost of becoming a member and enjoying the privileges of the association.

There is no getting away from the fact that the American Association is the best thing that ever happened for the nursery business of America. You really ought to get within the fold. It will give you a standing that means much to a man in any line of business.

SUGGESTED TOPICS FOR CONSIDERATION

Below we quote editorials from the New York "Sun" and the "Post Express" of Rochester, N. Y. We have not had time to investigate the statements made but believe the matter should be given publicity before the convention so that the question may be brought up at that time. Certainly there is something amiss when the government or anyone else has to go out of the country and order stock direct instead of buying such stock from nurserymen in the United States. It would seem that the nurserymen have not come to a full realization that the question of forestry is an important one, and that there is money in it for the nurserymen who turn in and grow forest seedlings on a large scale. The nurserymen are the men who can start the trees right and the United States nurserymen may as well have the profit as those in other countries.

The New York "Sun" says:

Not Entirely Satisfactory.

"New York State, having undertaken certain reforestation projects in the Adirondack preserve, has imported from Germany 950,000 seedling trees. Of these 500,000 are three years old, the others two. The three-year-old trees will be planted this year, the others being kept in nurseries until 1909.

"There is no reproach to the State in its adoption of an intelligent policy of forest renewal and preservation, but the necessity of purchasing the seedlings from European producers indicates a highly neglectful attitude on the part of Americans to the practical needs of a situation that has been discussed widely for ten years. It will not be questioned that the trees can be grown in this country; that the land, the skill and the labor can be got here; yet New York, a State not more anxious than any other to throw business to foreigners, finds it necessary to go abroad for material when it wants to replenish its forests.

"Incidents of this kind make us wonder sometimes whether the American of to-day is as preternaturally sagacious, as superhumanly farsighted, as commercially superior, and in every respect as far in advance of all other dwellers on the globe as he likes to be told he is."

"The Post Express" says: "New York State, having undertaken certain reforestation projects in the Adirondacks, has purchased 950,000 seedling trees in Germany, half a million of them being three years old; whereupon the "New York Sun" regrets that it was necessary to go to Germany; there has been a neglectful attitude on the part of Americans to practical needs, and the trees should have been grown here. But is "The Sun" correct

in the assumption that the trees could not have been purchased here? If it is correct then the situation is in the highest degree deplorable, and demands the immediate attention of American nurserymen."

We repeat the last sentence of the comment made by "The Post Express," and say:

"If it is correct then the situation is in the highest degree deplorable, and demands the immediate attention of American nurserymen."

AN IMPORTANT QUESTION

Is the originator of a fruit or tree entitled to the protection enjoyed by men who invent a machine, write a book or concoct a medicine? We think he is and more, too. This question will come up at the convention and in this connection the following bill, introduced by Representative Clark of Missouri, should be given your careful consideration. We quote the bill in full. It certainly appeals to us that if any man is entitled to reward by the government, it is the man who gives the world a new fruit, a new flower, a new plant, a new tree.

A bill to amend the laws of the United States relating to patents in the interest of the originators of horticultural products:

"Be it enacted by the Senate and house of representatives of the United States of America in Congress assembled, That title sixty, chapter one, Revised Statutes of the United States, be, and the same is hereby, amended by inserting therein, immediately following section forty-eight hundred and eighty-six, a section to be known as section forty-eight hundred and eighty-six a, and immediately following section forty-eight hundred and eighty-eight, two sections to be known as section forty-eight hundred and eighty-eight a and forty-eight hundred and eighty-eight b, as follows:

"SEC. 4886 a. Any person who has discovered or originated any new horticultural variety of plant, tree, or vine, not known or propagated by others in this country before his discovery or origination thereof, and not patented or described in any printed publication in this or any foreign country before his discovery or origination thereof, or more than ten years prior to his application, and which has not been on sale in this country for more than two years prior to his application, may, upon the payment of the fees required by law and other due proceedings had, obtain a patent therefor.

"SEC. 4888 a. Before any discoverer or originator of a new horticultural variety of plant, tree, or vine shall receive a patent for such variety, he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent Office a written description setting forth the name of plant, tree or vine to which such new variety belongs, the particular name by which such new variety shall be known, and a full, clear, and exact description of such new variety as will enable any person learned in the science of horticulture to identify such new variety and distinguish the same from other varieties. Such specification shall be signed by the discoverer or originator, and attested by two witnesses. The applicant shall make oath that he does verily believe himself to be the first to discover or originate the new variety for which he solicits a patent, and that he does not know and does not believe that the same was ever known before his discovery or origination thereof. Such oath may be made before any of the persons designated in section forty-eight hundred and ninety-two, Revised Statutes.

"SEC. 4888 b. All the regulations and provisions which apply to obtaining or protecting patents for inventions or discoveries and designs, not inconsistent with provisions of this title, shall apply to patents for plants, trees and vines."

AMERICAN FRUITS DIRECTORY

\$1

In advance will give you American Fruits for one year and a two line insertion in this directory in each issue up to and including March, 1909. If you are a subscriber send one dollar and your subscription will be extended one year and you will receive the same representation in the directory. Advertisers will have representation during life of contracts. Ten cents per line per insertion for each line additional to the number specified. Foreign nurserymen, \$1.50 per year.

Nurserymen

Alabama

Fraser Nursery Co., Huntsville—Cherry, peach, plum.
Huntsville Wholesale Nurseries, Huntsville—General line.
Oak Lawn Nursery, Huntsville—General nursery stock.
J. M. Crutchfield & Son, Cullman, R. F. D. 2—General line.
W. H. Dougherty, Athens, R. R. 4—Apples, peaches, and Kieffer pears.

Arkansas

Anthony's Union Nursery Co., Austin, R. F. D. 1—General nursery stock. Wholesale and retail.

California

Wagner's Nursery, Pasadena—Burbanks wonderful winter rhubarb.
Leonard Coates Nursery Co., Morganhill—Pecan seedlings, 'Pistachio nuts'.
Fancher Creek Nurseries, Fresno—Burbank's creations, roses, nut trees.
Wilson's Fresno Nursery, Fresno—Fruit trees and grape vines.

Arizona

R. A. Smith Sr., Box 38, Safford—General nursery stock.

Connecticut

The Burr Nurseries, Manchester—Hardy New England grown stock. See adv.
Thomas E. Burroughs, P. O. Box 78, Deep River—General nursery stock.

Delaware

David Rodney, Hartly, R. F. D. 2—Grower of strawberry plants.
W. T. Massey, Smyrna—Grower of choice fruits. Dealer in general nursery stock.
Slaymaker & Son, Dover—General nursery stock.

Florida

Arcadia Nurseries, Monticello—Leconte and Kieffer pear.
J. B. Curtis, Orange Heights—General nursery stock.
Reasoner Brothers, Oneca—Plants and trees, etc.
James A. Bear, Palatka—Pecan nursery stock a specialty.

Georgia

P. J. Berkman Co., Ltd., Augusta—Fruit, ornamentals, nuts.
Pike County Nurseries, Conrod—General line fruit, ornamentals, shade trees.
Smith Bros. Concord—General line fruit, and ornamentals at wholesale.
S. W. Peek, Hartwell—General nursery stock.
H. F. Sharp, Rome—General nursery stock.
S. R. Cockrill, Rome, R. R. 4—General nursery stock.
C. D. Hatcher, Knoxville—General nursery stock.

Idaho

J. C. Finstad, Box 85, Priest River—Fruit and ornamental trees.
J. W. Pittinger, Box 267, Nampa—General nursery stock.

Indiana

J. K. Henby & Son, Greenfield—Fruit and ornamentals.
H. W. Henry, La Porte—Strawberry plants.
H. R. Jackman, Waterloo, R. F. D. 1—Standard fruit trees.
H. M. Simpson & Sons, Vincennes—Cherry and peach trees.
W. C. Reed, Vincennes—Fruit, shade and ornamental trees.
C. M. Hobbs & Sons, Bridgeport—Fruit and forest seedlings.
The E. Y. Teas Co., Centerville—Largest growers for the trade of the new hydrangea.
Burns City Nurseries, Burns City—Peach in car lots a specialty for Fall and Spring Sales.
Wallace Whisler, Independence—General nursery stock.
Portland Nursery Co., Portland—Apples, pears, poplars, maples, California privet and catalpas.
L. B. Cochran, Box 245, Greensburg—General nursery stock.
L. K. Brower, Box 277, Rochester—General dealer in nursery stock.
W. W. Phelps, Noblesville, R. F. D. 1—General nursery stock.

The Lafayette Nursery Co., Lafayette—General nursery stock.
Halleck Nursery Co., Fair Oaks—Fruit and shade trees.
G. N. Moyer, Laketon—General nursery stock.
H. H. Meeker, Crown Point—General nursery stock.
J. H. Cunningham & Son, Rising Sun—Fruit trees and forest seedlings.

Illinois

R. Douglas & Sons, Waukegan—Evergreens.
L. F. Dintelmann, Belleville—Fruit, shade and ornamental trees.
John A. Cannedy Nursery and Orchard Co., Carrollton—Fruit stock.
Arthur Bryant & Son, Princeton—Nurserymen.
Irvin Ingels, LaFayette—General retail. Always a list of surplus.
Augustine & Co., Normal.
Harvard Evergreen Nursery, Harvard—Evergreen seedling and transplanted.
Aurora Nurseries, Aurora—Fruit, shade, ornamentals, landscape gardeners.
Capps Brothers, Mt. Pulaski—Fine fruits.
O. L. Dora, North 5th St., Charleston—Raspberry specialist.
Phil Strubler, Box 197, Naperville—Extra early new currant.
W. J. Hester, Chenoa—Elm and ornamental trees.

W. E. Galeener & Sons, Vienna—General nursery stock, full line.
Phil D. Hehner, Mascoutah—General nursery stock.
W. O. Chapman, Freeport, R. R. 1—General nursery stock.
The Phoenix Nursery Co., Box 625, Bloomington—Nurserymen and florists. Complete stock in all lines.
G. L. Hungate, Thompsonville, R. R. 2—General nursery stock.
Henry Daut, Decatur, R. F. D. 2—General nursery stock.
J. E. Root, Centralia, R. R. 2—General nursery stock.
G. D. Lynch, Pittsfield—Fruit and ornamentals. Propagator of a new white grape of the choicest quality.
W. T. Clutta, Box 313, Cobden—General nursery stock.
J. H. Bakewell, Box 517, Normal—General nursery stock.
W. E. Galeener & Sons, Box 16, Vienna—Full line nursery stock.
Clawson Brothers, Neoga, R. F. D.—Apple trees and berry plants.
J. L. Bloomer, 615 E. Empire St., Bloomington—Nursery stock, fruit and ornamental trees.
H. A. Aldrich, Neoga.

Iowa

Shenandoah Nurseries, Shenandoah—Complete general nursery stock.
Mount Arbor Nurseries, Shenandoah—Complete general nursery stock.
George R. Lochrie, Lorimor—Strawberries and red cedar.
C. G. Patten & Son, Charles City—Fruit, shrubs, vines and small fruits.
Snyder Bros., Center Point—Hardy Peaches for the north a specialty.
Oscar Thompson, Box 52, Roland—General nursery stock.
H. P. Ayres, Wilton Junction—General nursery stock. Evergreens a specialty.
S. P. Hartman, N. Ward 114, Ottumwa—General nursery stock.
A. Branson, New Sharon—Hardy fruit trees and plants.
H. A. Terry, Lock box 2, Crescent—General nursery stock.
W. O. Willard, Grinnell—General nursery stock.
Shaffer Brothers, Cascade, R. F. D. 26—General nursery stock.
H. L. Felter, Washta—Fruit and ornamentals.
I. Sharpless, Tipton, R. F. D. 6—General nursery stock.
Apple Grove Orchard, R. K. Lemon, Mgr., Matchellville, R. F. D. 3—Strawberry specialist.
L. H. Smith, Box 267, Council Bluffs—General nursery stock.
L. W. Holmes, Council Bluffs—Shrubs, roses, etc. Propagator of the celebrated Norfolk Cherry.
Sherman Nursery Co., Charles City—General nursery stock.
O. E. Ryther, Norwich—Everything that grows out doors.

Fred I. Slocum, Dexter—Strawberries.
R. E. Healy, Box 645, Bedford—Nurseryman and agent.
Whitham & Sons, Fairfield.

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J. H. Skinner & Co., Station A, Topeka—Fruit tree seedlings.
F. W. Watson & Co., Topeka—Fruit tree seedlings, Mahaleb stocks, Osage hedge.
Winfield Nursery Co., Winfield—Fruit, forest and shade trees.
N. E. Copeland, Oakland—Apple, pear, Mahaleb seedlings.
B. P. Smith, Lawrence—Berry fruits, plants, general nursery stock.
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T. H. Smallwood, Fort Scott—Fruit plants. Only the best is "Good Enough."
E. Rayl & Co., Box 144, Hutchinson—General nursery stock.
The Barteldes Seed Co., Lawrence—Tree seeds a specialty.
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M. E. Chandler, Argentine—Raspberries, grape vines, privet and shrubs.
Moundridge Nursery Co., Moundridge—General nursery stock.
A. Willis, Ottawa—General line.
James McNichol, Lost Springs—General nursery stock.
Holsinger Brothers, Rosedale—Small fruit plants.
The Wellington Nursery Co., Wellington, Box 127—General nursery stock.
W. C. Brown, R. F. D. 1, Winfield—Berry, fruits, plants and general nursery stock.
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Moundridge Nursery Co., Moundridge—General nursery stock.
D. W. Cozad, P. O. Box 156, La Cygne—General nursery stock.

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Willadean Nurseries, Warsaw—Fruit, shade, ornamentals, shrubs.
F. M. Burnett & Son—Oakland.
F. Walker & Co., 634 Fourth Ave., Louisville—General nursery stock.
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Sam H. James, Mound—Largest grower fine pecans in U S, grafted trees, grafting wood.

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Framingham Nurseries, South Framingham—Ornamentals, shade trees, flowering shrubs.
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R. D. Cleveland, Glen Arm.
J. W. Adams, 780 Chestnut St., Springfield—Fruit and ornamental trees and florists.
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Jackson County Nursery Co., Lee's Summit—Heavy stock of Apple and Cherry trees.
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Seligman Nursery, P. O. Box 28, Seligman—All kinds of berry plants.
J. H. Shockley, Stoutland—Strawberry plants.
W. H. Johns, Aud—General nursery stock.
National Nurseries, Box 36, Utica—General nursery stock.
Carrollton Nursery Co., Carrollton.
W. H. Litson, Nevada.
W. W. Stanley, P. O. Box 13, Campbell—General nursery stock.

Maryland

W. W. Wittman, 117 Hanover street, Baltimore—Peach seed.
Franklin Davis Nursery Co., Baltimore—Fruit, shade, ornamentals.
Charles M. Peters, Salisbury—Grape Vines.
J. G. Harrison & Sons, Berlin—Apple, peach, pear, strawberry plants.
W. F. Allen, 10 Martin street, Salisbury—Strawberry plants.
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United States Nursery Co., Rich—Roses, ornamental shrubs.
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J. R. Woodham, Newton, R. F. D. 1—Fruit trees, ornamentals.

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Jewell Nursery Co., Lake City—Fruit and ornamental nursery stock.
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W. N. White & Co., 76 Park place, N. Y. city—Exporter American deciduous fruits.

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Deane & Wright, Geneva—General nursery stock.

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W. M. Gould, Newark—Fruit, shade and ornamental trees. Roses a specialty.

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Catawba Nursery Co., Newton—General nursery stock.

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W. J. Graves, Painesville—Peach.

L. Green & Son Co., Perry—Fruit, ornamentals, roses.

M. Crawford Co., Cuyahoga—Small fruit plants and gladiolus bulbs.

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Ford Seed Co., Ravenna—Choice seeds and nursery stock.

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George Wellman, New Knoxville—Nursery and seedsmen.

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Rosemont Nurseries, Painesville—Roses a specialty. Address R. F. D. 2, Menton.

Theo. C. Franz, Box 72, Cozadale—Nurseryman and grower of small fruits. Berry plants a specialty.

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G. S. Pickett, Clyde—General nursery stock.

H. Benton, Ashland, R. D. 6—Nurseryman and fruit grower.

Fred Kaiser & Son, Box 28, Athalia—General nursery stock.

Fred Motter, Box 6, Tippecanoe City—General nursery stock.

W. A. Allen & Son, Geneva, R. F. D. 3—General nursery stock.

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Oregon Nursery Company, Salem—General nursery stock.

A. Miller & Sons, Milton—Fruit, shade, ornamental trees and shrubs.

Capital City Nursery Co., Salem—Dealers in fruits and ornamental trees.

T. M. Hicks, Woodburn—General nursery stock.

R. H. Weber, Box 64, the Dalles—Complete general nursery stock.

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W. R. Collins, Durant—General nursery stock.

J. W. Preston, Box 229, Kingfisher—Fruit, grape, shade and ornamental trees.

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The Morris Nursery Co., West Chester—Fruit, ornamentals, roses, peonies, iris, herbaceous plants, vines, etc.

J. B. Moore, Hatfield—Oak Grove Nurseries.

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Venango Nursery Co., Franklin—General nursery stock.

Amos H. Erb., Lititz—General nursery stock.

Calvin Cooper, Lancaster, Route 6—General nursery stock.

South Dakota

George H. Whiting, Lock Box 1108, Yankton—Hardy northwestern varieties.

Tennessee

Easterly Nursery Co., Cleveland, Tenn.—Peach, pear, apple, pecan.

Tennessee Wholesale Nurseries, Winchester—Apple, pear, cherry, peach.

Tullahoma Nursery and Orchard Co., Tullahoma, Tenn.

Giles County Nursery Co., Pulaski—Peach tree, peach seed and Carolina poplar.

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M. G. Black, Mt. Pleasant—Fomeroy peach, best money maker of the age.

Texas Nursery Co., Sherman—Southwestern trees.

Edward W. Knox, Successor to W. N. Knox & Son, San Antonio—Trees, Roses, Evergreens.

F. T. Ramsey, Austin—General line and native Texas bulbs, shrubs, etc.

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W. T. Hood & Co., Richmond—Peach, Angoulem, Kieffer and LeConte pear.

E. W. Jones Nursery Co., Woodlawn—Peach seed, strawberry plants.

Pleasant Finch, Mobermoco—Shade trees and Amoor River Privet.

C. D. Wenger, Dayton—General nursery stock.

West Virginia

Chas. Sweet, Piedmont—General nursery stock.

Wisconsin

Evergreen Nursery Co., Sturgeon Bay—White pine seed.

Foreign Nurseries

P. Sebire & Son, Ussy, Calvados—See advertisement.

Charles Detriche, Sr., Angers, France—See advertisement.

E. T. Dickinson, Chatenay, Seine, France—See advertisement.

Goossens & Hellemans, Oudenbosch, Holland—See advertisement.

E. C. Morris, Brown's Nurseries, Ontario, Canada—General line.

J. A. Wisner, Port Elgin, Ont.—General line and Wisner's Dessert apple.

G. M. Hill, Fruitland, Ont.—Standard fruit trees.

C. P. Carpenter and Son, Winona—General nursery stock.

Supplies, Insecticides, Etc.

Derrick Oil Co., Titusville, Pa.—Crude Oil for spraying.

Ward-Dickey Steel Co., Indiana, Harbor, Ind.—Box straps.

Elkhart Carriage & Harness Co., Elkhart, Ind.

Dayton Fruit Tree Label Co., Dayton, O.—Labels for nurserymen and florists.

Rhodes Mfg. Co., Grand Rapids, Mich.—Pruning shear.

Benjamin Chase Co., 11 Mill St., Derry, N. H.—Wood labels of all kinds.

McHutchison & Co., 17 Murray St., New York City, N. Y.—Raffia.

Maher & Grosh, 93 Adams St., Toledo, O.—Nursery 'Nives.

American Horticultural Distributing Co., Box 704, Martinsburg, West Va.—Manufacturers of "Target Brand."

Barrett Mfg. Co., Chemical Dept., Frankfort, Philadelphia, Pa.—Crude carbolic acid dark for emulsions.

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COMMENT AND DISCUSSION



R. C. BERCKMANS, of Georgia
Chairman of the Programme Committee. To Mr. Berckmans is due full credit for the excellent Programme that has been arranged for the convention.

Spraying

At this season of the year the orchardist is deeply interested in the work of spraying his orchard. He hopes to guard against the work of the codling moth by spraying with some arsenical compound, like Paris Green, or Arsenate of Lead.

The failure of the plum crop for two or three years, over a considerable portion of the state, seems to have turned the plum cureulio into the apple orchards, and we now have in our apple orchards not only the apple cureulio, but the plum cureulio.

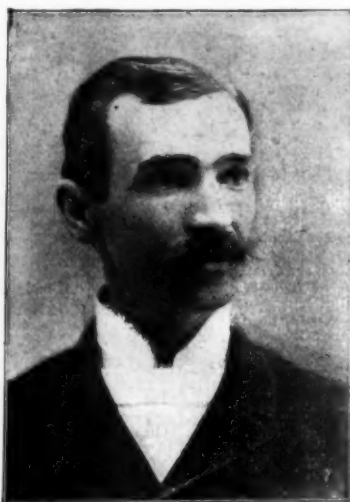
The orchardist likewise contends with fungus diseases, of which the apple scab is one of the most prominent. Fungus diseases are most readily controlled by spraying with Bordeaux Mixture. This raises the question, can the orchardist spray with a compound which at one application shall be effective in controlling the codling moth, the apple cureulio and the apple scab? In this connection, perhaps a portion of a recent letter from Professor L. R. Taft, professor of horticulture at the experiment station of the Michigan Agricultural College, will be found interesting. He says:

"I am very sure that the spraying which is given just before the blossoms open aids very much in the control of the cureulio and when the fruit trees are sprayed at that time and again within a week after the fruit has set, we have very little trouble from this insect, even though the fruit on neighboring trees is very badly marked by it. For eighteen years I have been very positive that by spraying the trees just before the blossoms open it is possible in seasons when the weather is cold and wet at blossoming time to save the crop from what might be entire loss owing to the attack of the apple scab fungus upon the blossoms or upon the young fruits after they have set.

"Last year the sprayed orchards in Michigan gave a good crop, while as a

result of the attack of the scab, the neighboring orchards either failed to set fruits or the greater part of it dropped later on. Very good results were secured from three applications, but our most successful growers are spraying four and five and even as many as six times in a season. Of course the number of applications would depend a good deal upon the season and varieties as well as the amount of injury done by the scab and the codling moth. I think it pays to spray four times under almost any condition, making a thorough application two or three weeks after the second and a fourth upon winter varieties of apples about the first of August, the latter being particularly for the codling moth.

"There is, of course, danger of russetting the fruit of some varieties with Bordeaux Mixture. I use four pounds of copper sulphate and about six pounds of lime for the first two applications, but reduce the amounts to three pounds of copper sulphate and five pounds of lime for the third application and two pounds copper



J. W. McNARY
Vice-President from Ohio

sulphate and three of lime for the August spraying. I would also use two pounds of arsenate of lead to fifty gallons with each application.

"There has been a wonderful increase in the interest shown in spraying in Michigan in the last year or two, particularly in the case of apples and vineyards. In the vicinity of Lawton full 200 power vineyard spraying outfits have been sold this year in addition to all that they had previously, besides many barrel outfits.

"The well-cared-for sprayed orchards are bringing the owners from one to five hundred dollars net per acre every year."

In discussing the same topic, Professor S. A. Beach, professor of horticulture and forestry at Iowa State College, Ames, Ia., under date of April 21st, writes:

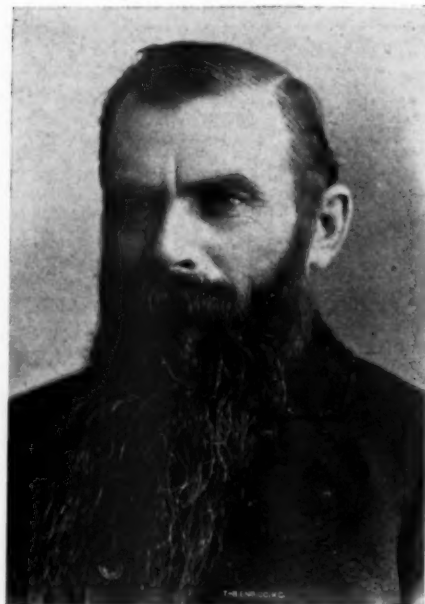
"In answer to your first question as to whether the Bordeaux Mixture if used but once, or at most twice, should be applied before the buds open, will say that the spraying which is made immediately before the blossoms open is the most important treatment of the whole season for

the control of apple scab and this is the fungus disease against which Bordeaux Mixture is chiefly used in apple orchards in this region of the country. Farther south where the orchards are badly affected with bitter rot, I understand that later sprayings are more effective in controlling that disease than are the early ones. In spraying the apple trees with Bordeaux Mixture just before the blossoms open I would advise you to use Arsenate of Lead or Paris Green as indicated in our Bulletin No. 89, which I send you under separate cover. (4 lbs. copper sulphate (blue vitriol), 5 lbs. of the best quick lime, 3 lbs. arsenate of lead, to 50 gallons of water). This will be effective not only against all of the early-eating insects, such as tussock moths, tent caterpillars, bud moths, case bearers, etc., but it will also do some good against the cureulio.

"I notice that you mention using sulphate of copper and state that it causes some varieties of apples to become russeted. I suppose you refer to the use of sulphate of copper combined with lime so as to make Bordeaux Mixture. In some seasons the use of Bordeaux Mixture does cause apples to become more or less russeted, but the benefits which follow the proper and thorough use of this spraying compound so greatly outweigh the disadvantages of having some of the fruit russeted that there is no question as to the economy of making the treatment as indicated in the bulletin above referred to.

"With regard to the matter of spraying for cureulio, will say that more thorough experiments have been conducted in fighting this insect by the Illinois Experiment station than by any other station in the country with which I am acquainted. The results of the treatment as given in one of their recent bulletins, Bulletin No. 108, are: 'Four times spraying of Ben Davis apples with Arsenate of Lead at intervals of ten days, beginning May 6th,

(Continued on page 22)



A. WILLIS
President of the Western Association of Nurserymen and Vice-President to the American Association from Kansas

The Cross-Inoculation of Fruit Trees and Shrubs with Crown-Gall^a

By GEORGE G. HEDGCOCK, Scientific Assistant, Investigations of Diseases of Fruits.

Introduction.

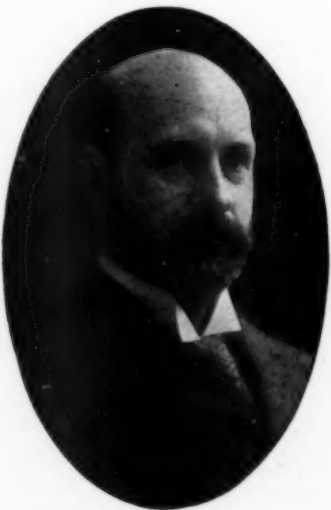
In another publication^b brief mention has been made by the writer of the identity of the forms of disease known as crown-gall occurring upon the almond, apricot, blackberry, cherry, peach, plum, prune, chestnut and walnut. This identity has been fully established by subsequent experiments with nearly 5,000 seedlings grown in sterilized soil, watered with sterile water, and inoculated in wounds with pieces of gall from the outer portions of galls taken from plants of the kinds mentioned.

In addition to these experiments, later and more extensive experiments with apple and pear seedlings carried on both in the field and the greenhouse with 15,000 carefully selected seedlings inoculated similarly with galls from the almond, apricot, blackberry, cherry, peach, plum, and rose gave results indicating that the soft galls occurring on the apple, pear and rose are also forms of the same disease. Smith and Townsend^c have shown that galls on peach trees can be produced by inoculations with pure cultures of *Bacterium tumefaciens* Sm. & Town., the cause of the formation of the galls on the Paris daisy. Coupling this fact with the results of the writer's experiments, it is possible that the soft galls of these plants with which he has experimented are caused either by the same organism or by closely related forms.

^a—The recent discovery of the bacterial nature of the crown-gall of peach trees and certain other plants clears up in a considerable measure the doubt regarding this important disease. The experiments here briefly described by Doctor Hedgecock were carried out before the cause of the disease was known, and are important in showing the extent to which cross-infection ordinarily takes place from one variety of plants to another. It is believed that the results are of sufficient practical as well as scientific importance to warrant their publication in this brief preliminary note.—B. T. Galloway, Pathologist and Physiologist and Chief of Bureau.

^b—Science, n. s., vol. 22, pp. 120, 121, July, 1905.

^cScience, n. s., vol. 25, pp. 671-673, April, 1907.



IRVING ROUSE, of New York
Chairman of the Committee on Tariff

Experiments With Crown-Gall.

Many of the writer's experiments with the soft form of crown-gall on apple and pear seedlings have given negative results. These experiments were usually small in extent. The results from three of the larger experiments are presented here.

In the most extensive experiments with the apple, healthy seedlings were carefully washed and divided into four lots of approximately the same number. The plants of one set were wounded by making a downward, slanting incision into the root, and then the wound was wrapped with thread in the same manner that grafts are wrapped, to be used as a control. A second control set was treated similarly, except that a chip or piece of clean, healthy apple root was inserted in the wound before wrapping. A third set was prepared like the first, except that a piece of soft apple gall was inserted in the wound. A fourth set was prepared similarly, except that a piece of hard apple gall was inserted. The seedlings in this and the following experiments were prepared, planted, and grown under the per-

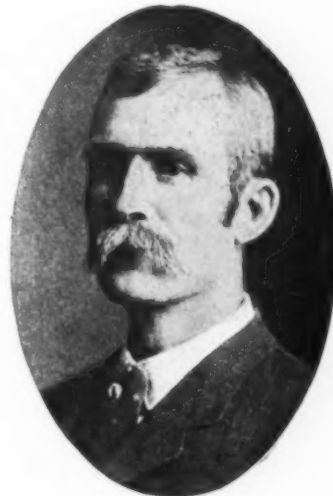


G. A. MARSHALL
Vice-President from Nebraska

sonal direction and observation of the writer. The trees were dug after growing one season, with the following results.

Of 977 trees grown in the first control, wounded only, 1.4 per cent. were diseased with crown-gall, chiefly of the hard form; of 920 trees in the second control, with healthy chips in the wounds, 1.5 per cent. were similarly diseased; of the set of 851 trees inoculated with soft gall, 10.9 per cent. were diseased with galls of the soft form and 2 per cent. with those of the hard form; of the set of 821 trees inoculated with galls of the hard form, 2.1 per cent. were diseased with galls, principally of the hard form.

These results, in the writer's opinion, show quite conclusively that apple crown-gall in its soft form is contagious, but that in the hard form it is either slightly or not at all contagious. Should it be shown later that the two forms are results of infection by the same organism it will probably follow in the case of the hard form that the apple tree has been able to resist and largely overcome the effect of the para-



G. H. WHITING
Vice-President from South Dakota

site by healing processes which lower its vitality. That such may be the case is shown by the results from several large experiments with grafted apple trees where the percentage of galls on nursery trees decreased rapidly for three years.

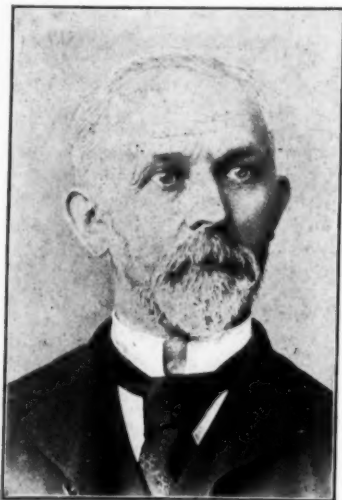
Another experiment carried out similarly with healthy apple seedlings resulted as follows. Of the control set in which the trees were wounded only, 0.8 per cent. of 657 trees were diseased with galls, chiefly of the hard form; of the control set of 672 trees with inserted healthy chips, 1.2 per cent. were similarly diseased; of 627 trees inoculated with chips of dead peach gall, 3.1 per cent. were diseased with galls, nearly all of the soft form; of 640 trees inoculated with chips of dead raspberry gall, 3.3 per cent. were similarly diseased; of 605 plants inoculated with chips of live rose gall, 3.5 per cent. were diseased as before. Although the percentage of infection in this experiment is very low, the soft galls produced by the inoculations were so typical of those which occur on stone fruits and roses, even to the rotting away of numbers of them at the close of the growing season, that it is very evident that the disease is the same on the apple as on the stone fruits where the galls have the soft form.

In a third experiment 1,600 healthy pear seedlings were prepared, planted, and grown as in the former experiments, inoculations being made with chips of gall from the following plants: Almond, blackberry, cherry, peach, raspberry, and rose. Galls from a number of other plants were used with negative results, but those named gave positive results, as follows: Of the control in which the trees were wounded only, none was diseased with galls; of the control in which the trees were inoculated with healthy chips, 1 per cent. was diseased with galls, about half being of the soft form; of the trees inoculated with almond gall, 4.2 per cent. were diseased with soft galls. The other sets showed the percentages of plants diseased with soft galls to be as follows: Blackberry galls, 9.5 per cent.; raspberry

(Continued on page 18)

ANESTHETICS IN FORCING PLANTS

(FROM EXPERIMENTAL STATION WORK, XLVI)



JOHN C. CHASE
Vice-President from New Hampshire

Attention was called in a previous bulletin of this series^b to the importance of controlling the dormant period of peaches, with special reference to preventing premature formation of buds and their subsequent destruction by frosts or freezing. Such control is now generally recognized as practicable with many plants and of value in their commercial production. Various means are employed to control the dormant period of plants, such as pruning, covering, attention to condition of growing wood in case of woody plants at the beginning of the period, and the like. In recent years attention has been turned to the use of anesthetics such as ether, chloroform, etc., for this purpose, especially with certain flowering and herbaceous plants. This method of treatment has been successfully practiced to some extent in Europe, but has not assumed commercial importance in this country.

Experiments by the Vermont Experiment Station with the use of ether in the forcing of rhubarb has been noted in a former bulletin of this series.^c In a report of later experiments by this station along the same line, W. Stuart says:

The use of anesthetics as an aid in the forcing of flowering shrubs, tuberous and bulbous plants, and herbaceous perennials, has not as yet assumed commercial importance among growers in this country. In Germany and France, however, they are now used extensively in many of the large commercial establishments. Their use at the present time is almost wholly confined to flowering shrubs, such as lilacs, viburnums, deutzias, spireas, azaleas, etc., which lend themselves most readily to anesthetic influences. This class of plants come into bloom early in the spring, complete their growth at a comparatively early date, and then pass into a state of rest. Normally plants will not start into growth until they have entered into the latter part of the rest period. The largest measure of success, therefore, in the use of anesthetics must necessarily come from plants subjected to the influence of ether or chloroform during the earlier stages of rest.

The process of treatment is a comparatively simple one. Plants which are either dormant or are entering into the stage of dormancy are subjected to the vapor of ether or chloroform in an air-tight room or receptacle for from twenty-four to seventy-two hours, depending upon the earliness or lateness of the treatment and the temperature, the anesthetic being poured from above into an open vessel within

the receptacle. The amount used per cubic foot of air space is largely governed by the temperature, moisture, season of year, and kind of plant to be treated. The higher the temperature and the later the season the more violent is the effect; hence the amount and time of exposure may be said to vary inversely with the temperature and the season when treatment is given. Apparently there is greater latitude in the amount that plants will stand than is currently believed. The action of chloroform is much more intense than that of ether, and only one-third to one-fourth the amount should be used.

The relative increase in earliness of blooming period of treated over untreated plants varies inversely to the earliness or lateness of the forcing period. It is claimed that growth is hastened about a month by treatment. The amount of bloom is considerably increased thereby, but on the average a gain of from ten to fifteen days is about all that may be expected.

As a result of his own experiments and of those of other investigators, Professor Stuart believes that "the anesthetization of flowering shrubs, such as lilacs, viburnums, azaleas, deutzias, spireas, etc., is a



M. McDONALD

Vice-President from Oregon, Who Will Address the Convention on the Subject of "Horticultural Inspection Laws as They Affect Nurserymen."

feasible and practical commercial enterprise for the florist." He found in his later experiments, as in the earlier, that etherization of rhubarb plants for winter forcing resulted in an increased yield, but that freezing of the rhubarb clumps at least early in the season, as is generally done in rhubarb forcing, is a necessary preliminary process, since etherization does not seem to perform the same function as freezing. He is of the opinion, however, that actual freezing may not be necessary for late forcing.

The action of ether on asparagus, potato tubers, apple, and palm seeds was also studied in the Vermont Station experiments.

There seems to be some evidence of a responsive action on the part of asparagus to ether, but the results secured thus far are so inconclusive as to preclude definite statement.

Dormant potato tubers were treated similarly as was the rhubarb, but in no case was there evidence of either beneficial or deleterious effect upon vegetation.

The etherization of apple seeds did not visibly accelerate germination; nor from the data now at hand is there likelihood that any beneficial results will accrue from the etherization of palm seeds.

The use of anesthetics would seem to have some promise of practical value in the forcing of plants, especially as an aid in more completely controlling the period of maturing of the desired product, but undoubtedly many of the details of the practical applications of the method and the limits of its usefulness remain to be worked out.

a—Compiled from Vermont Sta. Bul. 129, Rpt. 1906, p. 279.

b—U. S. Dept. Agr., Farmers' Bul. 316, p. 6.

c—U. S. Dept. Agr., Farmers' Bul. 233, p. 18.

Cross-Inoculation

(Continued from page 17)

galls, 6.6 per cent.; peach galls, 7.8 per cent.; rose galls, 15.8 per cent. These positive results prove that the soft galls of the pear are identical with those of the stone fruits and the raspberry, the blackberry, and the rose.

Summary.

From the results obtained by five years' experimentation in the greenhouse with seedlings grown under carefully regulated conditions, the following facts are noted:

The soft galls from the almond, apricot, blackberry, cherry, peach, plum, prune, and raspberry have been transferred easily to seedlings of the almond, apricot, peach, and raspberry; less readily to those of the blackberry, cherry, plum, prune, and pear; and with great difficulty to seedlings of the apple, chestnut, walnut, and rose.

The soft galls of the apple, chestnut, walnut, rose, and pear, as a rule, have not been transferred readily to any of the plants mentioned. Evidence has been obtained of a wide range of susceptibility in different varieties of the same plant. This has been noted in varieties of the apple, blackberry, cherry, chestnut, pear, and rose.

The results of these experiments show that the opportunity presented for breeding and selecting races of plants resistant to this common and destructive disease is excellent.



J. B. PILKINGTON, of Oregon

Who Will Address the Convention on the Subject of "Elements of Success in the Nursery Business."

NATIONAL HORTICULTURAL CONGRESS

By JAMES HANDLY, QUINCY, ILL.

Having enjoyed the pleasure of being in Council Bluffs, Ia., when the National Horticultural Congress was organized, I wish to heartily commend its good features to all fruit growers. It starts with J. P. Hess, president; W. S. Keeline, first vice-president, and George W. Reye, secretary-treasurer. These three officers reside in Council Bluffs.

It is the desire of the Congress to have every organization that comes in touch with the horticultural industry recommend a representative to be placed on the list of vice-presidents of the organization. The annual dues for membership are only one dollar per year and it is anticipated there will be an immediate enrollment of thousands of members. Representatives of all varieties of fruit growing and garden products were in attendance when the Congress was organized.

The National Corn Exposition will take place in Omaha next December, the exact dates to be announced later. There is a moral certainty that it will be the greatest and grandest corn exposition ever witnessed in the United States, drawing many thousands of visitors.

Plans are being formulated by the National Horticultural Congress to have a grand exposition of fruits and vegetables on the opposite side of the river from Omaha, at Council Bluffs, on the dates of the national corn display. Entries of fruits and vegetables will be opened to the world and prizes to the value of thousands of dollars will be awarded. It would richly pay every fruit and vegetable grower to become a member of the Congress and receive an impetus that would lead on to better and more satisfactory results.

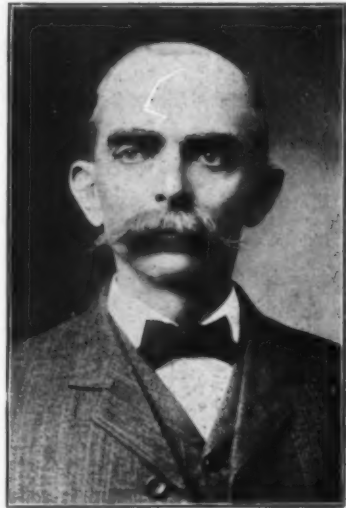
It is a well known fact that the high hills east of Council Bluffs form a most desirable place for growing grapes. From a comparatively small area of country one hundred carloads of grapes are shipped annually. This industry led to the formation of the Council Bluffs Grape Growers' Association and those having the slightest doubt of what may be accomplished in a general joining together in similar pursuits should visit Council Bluffs and wit-

ness the splendid efficiency of this association which inspires everyone with renewed energy in urging a grander union of efforts.

Washington Fruit Tree Statistics.

Reports from the various counties just compiled by F. A. Huntley, state horticultural commissioner, show that Washington had 9,184,366 bearing fruit trees in 1907. Twenty-five thousand acres have been added since the spring of 1906, and it is expected that more than 1,000,000 trees will be set out before the end of this year. The value of a full crop of fruit is estimated to reach from \$35,000,000 to \$40,000,000.

The state has within its boundaries 5,337,094 apple trees, 857,892 pear trees, 1,392,760 peach trees, 557,674 cherry trees and 1,044,946 plum and prune trees, besides 133,883 apricot, quince, nectarine, almond and English walnut trees not enumerated in the foregoing statistics. This is a gain of 3,977,615 trees since the



R. ALBERTSON
(See page 25)

was estimated at a commercial value of \$10,000,000, the crop being a matter of 5,000,000 boxes of 50 pounds each. The fruit was grown in thirty-seven counties.

CATALOGUES

We are in receipt of a catalogue recently issued by the Turkey Creek Nurseries. The front page bears this announcement which should be of interest to the trade:

"Since issuing our last catalogue, the business of the Turkey Creek Nurseries has been incorporated under the firm style of The Barber-Frink Company, with an authorized capital stock of \$50,000.00.

"This incorporation has enabled us to make a number of improvements in our facilities for promptly and properly handling trees; for instance, we have put in a thorough system of water works; have made available a good sized packing-house; added tools and implements; bought additional mules; connected our several nurseries with bridges and crossings over creeks, and put all under one fence; have built and improved tenant houses; have fitted up our offices with latest appliances and systems; have employed additional help both in office and field; and have enlarged our plantings of nursery stock very materially.

"For anything you want in the way of nursery stock address

"THE BARBER-FRINK COMPANY,
"Macclenny, Florida, U. S. A."

SEEDLESS APPLE CONCERN

Under order of common pleas court, Receiver George W. Welles, of the Michigan Spencer Seedless Apple Company, offered for sale at public auction Wednesday morning 285,000 apple seedlings and 3,000 seedless grape vines, says the Toledo, Ohio, "Blade." The auction took place in the county clerk's office at 10 a. m., and the character of the articles that were sold makes the affair unique.

Receiver Welles sold 60,000 three-year-old apple seedlings suitable for rooting grafting, and 225,000 one and two-year-old apple seedlings suitable for budding next year. Of these, 75,000 have been budded with Spencer seedless apples, and there are 10,000 budded trees, from three to five feet high, and 65,000 trees one or two and a half feet high.

They represent the assets of the Michigan Spencer Seedless Apple Company, which became enveloped in financial difficulties some Hamilton about three years ago, following the successful experiments of a western horticulturist named Spencer. At that time companies were organized in various states. The Toledo concern purchased land in Perrysburg and West Toledo and opened nurseries, which are the largest in this part of the country.



P. A. DIX
Vice-President from Utah

report given out in March, 1907, and an increase of 64,083 trees of the last named varieties.

Yakima county heads the list with 1,795,689 apple trees, Chelan county is second with 717,324 and Spokane county is third with 459,937. Yakima county also leads in pears, peaches and cherries, the total acreage devoted to the four fruits being 34,885, and 192 acres in plums and prunes, while Chelan county has 7,032 acres devoted to the six fruits. Spokane county has 7,388 acres in fruit trees, including all the varieties named.

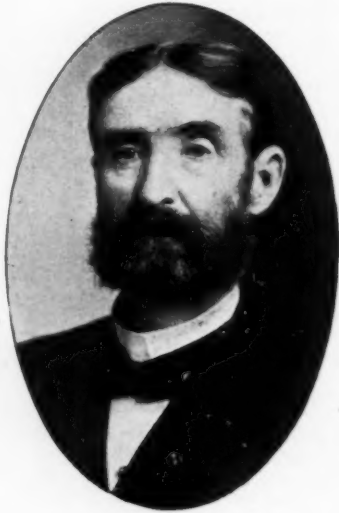
More than half a million apple trees came into bearing in Yakima county last year, while in Chelan county there were 317,324 and Spokane county showed a gain of 148,777 trees. Pierce county also made excellent gains, that in apple trees being 23,149, while Stevens county shows an increase of 97,760 trees or 150 per cent. over the year before. Okanogan county added 52,835 trees to the 32,475 in bearing last year.

Growers say that the crop of 1908 gives promise of being the greatest in the history of the state. The apple yield in 1907



CHAS. T. SMITH
Vice-President from Georgia

FORESTRY TOPICS



C. L. WATROUS, of Iowa
Chairman of Committee on Entomology

Profit in Waste Places on the Farm.

Many poor soils, now waste spots on the farm, would become profitable if planted with the right kind of forest trees, and cared for in the right way. Trees will often grow where grain and grass will not. Swamps, stony ridges, exhausted fields, and washed hillsides need not be abandoned. There is money in most of them if they are set to work producing woodlots and forests. But knowledge and judgment are necessary, and a bad guess may be costly.

Many trees do well in their soils—cone-bearing trees in particular. The farmer is fortunate whose land has no poor spots. Few landowners are so well off. Fertile acres are usually fairly profitable, but the gravel bars, rocky knolls, marshy swales, and exhausted and eroded slopes are not. Scarcely one of them need remain unproductive. They will grow timber—pine, locust, poplar, osage orange, oak, chestnut, or some other kind. But the soil must be studied, and the species selected to suit it. Failure might follow the planting of walnut on soil suited to white pine, or vice versa.

Studies of various regions and trees that suit them have been made by the Forest Service at Washington. Results and conclusions have been published, and may be had for the asking. The aim of these studies has been to point out how the farm's waste and neglected corners may be turned into woodlots where the farmer may grow his own posts, poles, fences and sawlogs.

It is decidedly worth while to keep all of the farm at work. The owner pays taxes on all his land, and is out of pocket for whatever is not earning him something. Further, by growing a tree crop on land which is too poor to plow, the quality of the land itself is improved. Forests add humus to the soil, bettering its character; and it has lately been discovered that the decaying leaf litter has also the power of gathering from the air a certain amount of nitrogen, the most important of plant foods. In this respect

the forest does for the soil what leguminous crops, like clover and alfalfa, do. Wood growing on worn-out land thus becomes doubly profitable. The land is made useful and improved at the same time.

Trees as Crops

"It is as sure that forest land can be made to grow successive crops of trees under proper methods as that plow land can be made to grow successive crops of wheat," says the Secretary of Agriculture in the part of his annual report wherein he speaks of the National Forests.

This country which once could boast of forest resources richer than any other nation in the world, has been cutting three times as much timber for a number of years as there is grown, and the consideration of timber as a crop to be carefully harvested has come at a time when many of the virgin forests are already depleted. Continuing, Secretary Wilson says in part:

"Just as American farming has had to develop and is still developing methods



GEORGE S. JOSSELYN, of New York
Who Will Respond to the Mayor's Address of Welcome
at the Milwaukee Convention.

adapted to the conditions of each region to make the best use of the agricultural lands, so must the forester learn by scientific study and practical trial to make the best use of our timberland. And the best use means, of course, not merely its best use for the growing of trees, but its best use with reference to all interests directly or indirectly affected by it.

"As time passes, it will doubtless appear that the principles which centuries of experience in older countries have placed at our command can be applied with increasing good results as we grow more familiar with our own special conditions. The issue is sharply between caring for our forests by applying a system of known efficiency, or suffering certain loss not only of the forests, but of usable water and soil as well, through the operation of causes as certain to act as are the rivers to run to the sea."

The Forest Service now has administration over more than 164,000,000 acres of land. This is slightly more than one-fifth of the country's total forested area; the remainder is in the hands of private owners. Nearly all the timberland of the unappropriated public domain is now in the National Forests. This means that it is being protected against fire, theft, and

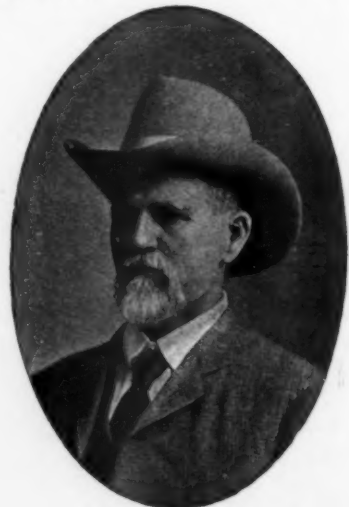
wasteful exploitation, that its power to grow wood and store water is being safeguarded for all time, and that nevertheless, its present supply of useful material is open to immediate use whenever it is wanted. The report says:

"The timber in the National Forests, which is the legacy of the growth of centuries, is now in the truest sense public property, administered for the benefit of the people—primarily for the benefit of the people of the West, since they are nearest at hand, but on the whole, for the benefit of every part of the country, since the welfare of every section is interwoven with that of all others. The communities and settlers adjacent to the forests are safe from any fear of monopoly of one of the chief necessities of civilized man."

The Annual Cherry Fair at Salem, Ore., is being looked forward to by the fruit growers of Oregon and the entire Pacific Coast with keen interest. Indeed, fruit experts in all parts of the continent are watching this event, as it stands for the best exhibition of the best cherries grown anywhere in the world.

Although the date has not yet been fixed for this fair in Salem, it is safe to say that it will be held early in July, as last year's date was July 10, 11 and 12. There is now every reason to believe that a large crop is in store for the cherry growers of the state for this season, as they have bloomed bountifully and, as far as can be learned, they fully fertilized and a large crop of fruit has set.

At the 1907 Cherry Fair over sixty premiums were awarded, including about thirty beautiful silver cups. These prizes were captured by growers from all parts of the state, but mostly by those in the neighborhood of Salem. The judges upon that occasion were leading fruit men of the Northwest and the greatest satisfaction prevailed. Upon the occasion of this fair the Pacific Coast Nurserymen's Association held its annual meeting in Salem, and the delegates were so thoroughly imbued with the importance and grandeur of the cherry crop that by unanimous vote Salem was declared the Cherry City of the World.



R. W. KIRKPATRICK
Vice-President from Texas

YOUNGERS & COMPANY

Geneva, Neb.

Offer for Fall Trade

Apple, Plum, Peach and Cherry Trees

SEEDLINGSApple, Black Locust, Catalpa Speciosa, Maple,
Elm and Osage

Also a Full Line of

Ornamental and Shade Trees

WRITE FOR PRICES

Established in 1870

Special Offers for Fall 1908

Large stock of 2 year apple in both Buds and Grafts

Peach one year largely 5-8 and up

Early Harvest B. B. root grown plants in both one and two
year

General line of nursery stock at lowest prices

Send want list for Special Prices

Parsons Wholesale Nurseries

E. P. Bernardin, Parsons, Kans.

Established in 1870

Nurseryman and Fruit Grower Active.

"Best managed, cleanest fight, largest majority ever given in any election in Worcester county—2,905 dry and 845 wet votes cast," is said of the election held in Worcester county, which was managed by Orlando Harrison of Berlin, Md., as chairman. Each district was thoroughly organized and every man, woman and child did their part.

This was a short, whirl-wind campaign, only five weeks.

The speakers were men of the highest type. More than two hundred meetings were held and all efforts were used to see that no one was abused.

Dry votes were needed and that is what was received. Never before in the history of old Worcester did the people respond so promptly.

As a further vindication of the dry people, Mr. Harrison was re-elected Mayor of Berlin for the fifth consecutive term. The fact that there was no opposing candidate attests his business-like administration of the affairs of the office as well as his great personal popularity.

He makes the statement, "If people would eat more fruit they would not have the desire for intoxicating liquors," and cites the fact that at fruit growers and nurserymen's conventions but a small percentage of the men will be found to patronize the bar.

Mr. Harrison has donated plants and fruit trees to each pupil of the high schools in the county to start them to love farm

work and eat fruit. He is interested in various apple orchards in Maryland and West Virginia, aggregating more than one hundred thousand trees.

He is the active member of the nursery firm of J. G. Harrison & Sons at Berlin.

I am in favor of a National Inspection Law, and I think that every nurseryman in the United States should be for same, and work with that end in view. I also wish to suggest that in the states where bonds have been filed, and licenses taken out for the selling of our goods, should be revoked, as it is very unjust. However, we would prefer to pay license, and have a national inspection law, rather than the present state laws.—A nurseryman's opinion on the National Inspection Law.

Grape Roots That Grow**Increase in Acreage and Varieties**

We make a specialty of growing Grape Roots. Making strong grades and prompt shipments. We have heavy stock for Nurserymen's retail trade. Light stock and cuttings for nursery row. Write for special prices. Correspondence and inspection of stock invited.

FOSTER & GRIFFITH, Fredonia, N. Y.**OUR SPECIALTY****Burbanks Wonderful Winter Rhubarb**

Plant any time from September till May. Headquarters for California Fruits and Berries. Write for quotations on your needs.

Peach Seed in Car Lots

WAGNER'S NURSERY, Pasadena, Cal.**The New HYDRANGEA****ARBORESCENS STERILIS**

(Hills of Snow)

Grown especially for the nurserymen's retail trade. Colored plates free. Attractive circulars at cost.

J. W. McNARY, 316 W. 4th Av., Dayton, O.**WOOD LABELS**—Of All Kinds for—
NURSERYMEN and FLORISTS**The Benjamin Chase Co., 11 Mill St., Derry, N. H.****GRAPE**

All Old and New Varieties
Immense stock warranted true. Quality unsurpassed. A fine stock of CARPENTERS' EARLY. An extra fine stock and full assortment of varieties of CURENTS and GOOSEBERRIES; also BLACKBERRY ROOT CUTTING PLANTS. Catalogue and Price List Free. Send list of wants for prices.

VINES**T. S. HUBBARD CO., Fredonia, N. Y.****NURSERYMEN'S KNIVES**

Hand Forged Razor Steel Warranted

Since 1877 we have been selling the nursery trade, and have over 3,000 nurseries in our list of customers. It is a trade we take great pains to please. We issue an 80-page catalogue of Knives, Shears, Razors and Strops, and send free to all who ask for one.

This cut is exact size of our **PROPAGATING KNIFE**, No. 59½. No. 59 is same size but has budding blade. Price of either, 50c. postpaid. Blades close and are finest grade of razor steel, hand forged, file tested, handle is white; "Easily seen." You have been paying 75c for a vastly inferior knife. **NURSERY BUDDERS**—Fast handle, 25c each; for pocket, 35c. **GRAFTING KNIFE**—Fast handle, 2 sizes, 20 and 25c each. **NURSERY PRUNER**—Fast handle, 50c; heavy pocket pruning knife, 85c. Liberal discount in dozen lots. We wish to trade direct with you. We have a 12 page List of Nurserymen's Knives and Shears which we will send you on request.

MAHER & GROSH CO., 92 A Street, Toledo, Ohio

When writing to advertiser please mention AMERICAN FRUITS

Fifty Sixth Year Under One Management

**American
Everblooming
Hydrangea**

(H. Arborescens Sterilis)

Called also "Snowball," "Hills of Snow" and "Grandiflora Alba"

We Offer

The largest stock of 1 and 2 year nursery grown plants in America of this best of all hardy flowering shrubs introduced in recent years.

Also pot plants for nursery planting during June. Inspection of stock desired. We are 20 minutes by trolley from Richmond, Ind.

LISTS FREE**THE E. Y. Teas Co.**
Centerville, Ind.**George H. Whiting Nurseries**

A general stock of Hardy Northwestern Varieties that will succeed anywhere. It will pay you to get my *Free Descriptive Catalogue*. It is accurate, concise and original, and based upon 25 years' experience in South Dakota. The best of its kind in the Northwest to-day.

Geo. H. Whiting, Prop., Lock Box 1108, Yankton, S. Dak



(Continued from page 9)

SHADE TREES FOR STREETS

seem very unfavorable. It attains a large size with spreading branches, and should only be used on wide streets.

The Western Plane (our native Buttonwood) is liable to a leaf blight in some sections of the country, and where such is the case it should not be used for street planting. Where it appears to be immune from that however, it is an excellent street tree, and stands well in cities, in conditions hostile to trees generally. It becomes a large spreading tree in time and should be used on wide streets. There are few trees that stand severe pruning better than the planes. They have been used extensively in Washington, and severely pruned where occasion demanded it, and they always recuperate and grow rapidly again.

The Silver Maple is largely used as a street tree, and it is a remarkably useful subject. With the exception of the Poplars (which really ought never to be considered in street planting), it grows more rapidly than any other tree. It shows great virility under harsh city conditions, and it does not cast as dense a shade as most of the other maples. The habit is loose and sprawling, and it is liable to be damaged in summer storms, but it can be rendered immune from that tendency by having the branches foreshortened in its younger days.

The Sugar Maple is about the slowest growing of any of the maples, but it is admirable for wide streets. The habit is usually upright, and some times pyramidal. It casts a very dense shade as it forms a thick branching head, but it can be much benefited by thinning out the branches where they are congested, and in doing so they should be cut back to the trunk, for if they are cut back partly, it will only aggravate the evil of density.

The Black Maple which in a general way resembles the Sugar Maple, and is generally taken for it, has about the same comparative degree of growth. The habit is more spreading. It is excellent for wide suburban streets.

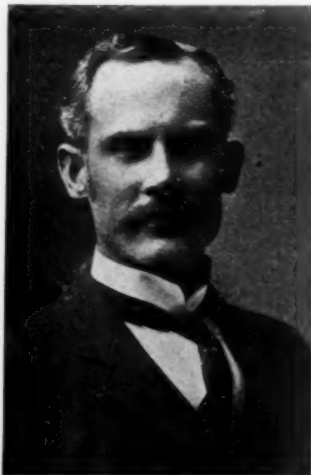
The Norway Maple is a very serviceable street tree, and it grows with considerable rapidity. The habit is quite variable, in some individuals the branches are much spreading, and in others ascending. It is well adapted for narrow streets. It casts a very dense shadow, and is much benefited by thinning out the branches where they are crowding each other.

The White Ash has been very successful in many cities as a street tree, and it stands smoke well. The habit is somewhat thin as compared with many other trees, but with many people this is a good attribute, as they prefer trees where lights and shadows play freely amongst the branches. The White Ash does not have the wide spreading habit of the larger trees and we would recommend its use for intermediate streets.

The Horse Chestnut has been extensively planted as a street tree in many cities, but we do not think it is a good street tree, as the leaves are frequently blighted and drop prematurely, and the numerous nuts in the Fall are a considerable nuisance. We would recommend as a substitute for it the Ohio Buckeye, as it retains its leaves much better in city conditions and is a much cleaner tree. It is well fitted for narrow streets.

The European Birch has been planted considerably as a street tree and where some streets in various cities have been devoted to it exclusively it has looked remarkably well for a few years. The Bronze Birch Borer has attacked the European Birch so fiercely during recent years, killing thousands of them everywhere, that it is useless to plant it in the meantime. Notwithstanding statements to the contrary, we have not observed that this borer attacks the American birches, at least to any injurious extent, and we would recommend the Canoe Birch as an excellent substitute for the European Birch for narrow streets. It grows quite rapidly, the habit is graceful and gives a light shade which is very agreeable, and seems to stand well in city conditions.

The Red Oak is a good street tree for wide streets. There is a prevalent opinion that all oaks are slow growing and most oaks are; but the Red Oak, other conditions being equal, will grow as fast as a Sugar Maple, and in some instances it has appeared to us to outstrip the Sugar Maple. In suburban streets where the soil is good and the grade has not been disturbed by cutting or filling, no mistake can be made in planting the Red Oak.



R. W. CHATTIN
Vice-President from Tennessee

The Pin Oak has proved an excellent street tree in many cities. For some reason which is difficult to ascertain the Pin Oak does not do well in the central part of Western New York, and it would be unwise to use it as a street tree in that region. Around New York City, Philadelphia, Baltimore and Washington, it has proved to be excellent, and it grows about as fast as a Sugar Maple.

The Japanese Fern Tree, or Ginkgo, has lately been used to some extent as a street tree in various cities. It seems to stand city smoke well, and appears to be immune from diseases and insects. It does not give a dense shade, as the habit and branching is open. Whilst it gets to be a large tree in many years time, the habit of growth is such that it is well adapted to narrow streets.

The Portland Nursery Company, of Portland, Ind., is planting out 480 acres in orchard in Wheeler, Texas, the orchard being composed of apples and peaches. The prospects for small fruits in this locality are good but the cherries are all killed is the report of the company on conditions in its own state.

(Continued from page 16)

COMMENT AND DISCUSSION

increased the bulk of the crop by 54 per cent., number of apples 26 per cent., and average size of fruit 21 per cent. It diminished the curculio injuries by 69 per cent., which is the measure of the protection due to the treatment.

"The results of the experiment as might be expected were not uniform, but when carried through a series of years the general conclusion was reached that spraying may properly be regarded as one of the efficient ways of fighting the plum curculio in apple orchards. It is an advantage if this can be supplemented by frequent tillage during July and August, stirring the ground to a depth of at least 2½ inches.

"There is no doubt but what the dropping of apple fruit early in the season may be caused by attacks of the apple scab fungus. I have personally seen the apple scab fungus appear on the stems of the blossoms before the blossom opened, although it should be said that it is not common for the disease to have progressed sufficiently at that period to be visible to the naked eye. In some cases the scab attacks the blossom and causes much injury and it also attacks the young, newly developed fruits and as you have suggested injures the crop by causing a premature dropping of the fruit as well as disfiguring the fruit which remains on the trees."

In our own work we began early enough to cover the major portion of our home orchards of 80 acres with this first spraying. From the fact that the Bordeaux Mixture applied last season did some harm by russetting some varieties of apples, we are using this year only 3 lbs. of sulphate of copper, 5 lbs. of hydrated lime and 2¼ lbs. of Eagle brand Arsenate of Lead.

The month of April, up to the time of writing, has been so very warm and dry that the orchards have been forced into bloom with marvelous rapidity. This upset our calculations and we failed to get ready to spray six of our contract orchards early enough to cover them before the opening of the bloom.

When the blossoms commence to open quite freely we have not thought it wise or safe to spray, and we are compelled to delay further work until after the petals of the blossoms have fallen, when we will spray the second time. We usually follow the second spraying a few days later with a third, which acts as a check on the second. About the middle of July we hope to spray again and then to spray all our winter varieties from the 10th to the 15th of August, hoping in these later sprayings to check the work of the second brood of codling moth.

E. F. STEPHENS.

Crete, Neb.

Cold storage of fruits has its problems as do other phases of the fruit industry. To one of these problems, that of the susceptibility of stored fruit to various rots, Bulletin No. 297 of the New York Agricultural Experiment Station, Geneva, contributes valuable data. The experiments show that certain rots are perfectly controlled at temperatures ordinarily used in cold storage, but that blue mold is still active at or just above the freezing point. A method of destroying the germs of the fruit-rot fungi is also given. Both storage warehouse men and fruit growers should know the facts shown by this bulletin. It may be secured without cost, by writing to the station

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Of Every Description for

Nurserymen and Florists

The quality that gives satisfaction. No orders too large for our capacity, or too small to receive our careful attention. Samples and prices cheerfully given.

Dayton Fruit Tree Label Co.

South Canal St. Dayton, Ohio

Interesting to
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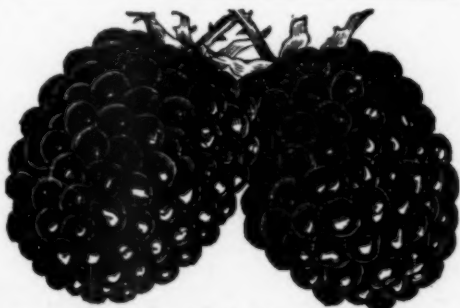
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Greatest assortment,
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RICH, MISS.



Everything in Small Fruit Plants

ASK FOR PRICE LIST

W. N. Scarff, New Carlisle, O.

JAS. M. KENNEDY, Dansville, N. Y. Established 1876

I offer for Fall and Spring

Standard Pear 2 yrs., Bartlett and Seckel and other varieties. Dwarf Pear 2 yrs., general list. Plum on Plum 2 yrs., European and Japans. Cherry 2 yrs., Sweets and Sours. Apple 2 yrs., budded, general list. Quince 1 and 2 yrs., Champion, Bourgart and Angers.

All stock free from San Jose Scale and prices as low as the lowest for first-class stock.

The Tennessee Wholesale Nurseries

WINCHESTER, TENN.

I offer for the Fall and Spring, full line of Nursery stock including Apple, Pear, Cherry and Peach. I make a specialty of carload lots of peach. The most complete line of peach in the country. Try me.

J. C. HALE, Prop.

Knox Nurseries

Cherry Trees—From Vincennes, Indiana.

Pecan Trees—Paper shell sorts from our branch nursery in Monticello, Florida.

H. M. SIMPSON & SONS, Props.
Vincennes Ind.

Established in 1866 500 Acres Under Cultivation

W. T. HOOD & CO.

Old Dominion Nurseries

Richmond, Va.

Peach Trees, grown from natural peach seedlings. Angoulem, Kieffer and Le Conte Standard Pears, 2 year. Fine trees.

Can offer 50,000 Peach Seedlings, grown from natural peach pits, nice size for lining out in Nursery for budding, or suitable for grafting in the south, also a nice lot of Japan Pear Seedlings.

Correspondence solicited.

Box Straps

Ward-Dickey Steel Co.

Indiana Harbor, Ind.
Manufacturers of Planished Sheet Steel

P. SEBIRE & SON

Nurserymen, Ussy, Calvados, France

Offer a general assortment of Fruit Tree Stocks, such as Apple, Pear, Myrobalan Plum, Mahaleb and Massard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, Etc. The largest stock in the country. Prices very low. Grading and packing the very best. Send for quotations before placing your orders. Catalogue free.

C. C. ABEL & CO.

Agents for United States and Canada

110-116 BROAD STREET, NEW YORK

BEVERLY, OHIO, NURSERY

We have for Fall and Spring, 1908-1909 a large stock of standard varieties of Peach and Apple Trees, all straight, healthy and well rooted. Prices reasonable. R. R. Station at Waterford, Ohio. Correspondence and personal inspection cordially invited.

W. T. MITCHELL & SON, BEVERLY, OHIO

LOCAL SALESMEN WANTED

The Simplex Tree Baler

Does the Work. Price \$16.00

It is now working in fourteen states.

Also Fruit and Shade Trees, Evergreens, Ornamental Shrubs, Roses, Peonies, Gladiolus, Cannas and Dahlia Roots.

L. F. DITTELMANN, Box 227, Belleville, Ills.

Over 1,000,000 Trees

Write us for prices on Apple, Cherry, Peach, Pear, Plum, etc.

Send us a list of your wants and we will make you special prices on the whole.

Nurseries at Carrollton and Jerseyville, Ill.

John A. Cannedy N. & O. Co., Carrollton, Ill.

Pecan Seedlings

One year, 8 to 10 inches; from very prolific strains, large paper shell, California grown. Ask for Prices. Express prepaid.

Pistachio Nut

(for Arizona, New Mexico, California and the Southwest) Strong seedlings, from California grown seed. Ask for Prices. Express prepaid.

Both ready in November.

Leonard Coates Nursery Co. Inc.,

MORGANHILL, Santa Clara Co., CALIFORNIA

Graves Peach

An Early Yellow Freestone Ripening a week before Crawford's

Early. Trees from the originator have seal attached. Prices free.

ORIGINATOR

W. J. GRAVES, PAINESVILLE, OHIO

RAFFIA

RED STAR BRAND

The Nurseryman's grade in long white strong strands in braided hanks. Stock always on hand. About quality ask your neighbor. About price—ask us.

McHUTCHISON & CO.

17 Murray St. NEW YORK CITY

When writing to advertiser please mention AMERICAN FRUITS

J. H. SKINNER & CO.

SUCCESSORS TO
PETERS & SKINNER

Station A, Topeka, Kansas

For Fall of 1908

We offer a general line of nursery stock. We expect to have our usual supply of

Forest Tree Seedling

Apple and
Pear Seedling

CHARLES DÉTRICHÉ, SR., ANGERS, FRANCE

Grower and Exporter of

Fruit Tree Stocks, Forest Tree Seedlings, Rose Stocks, Shrubs, Vines and Conifers for Nursery Planting

A NEW PRICE LIST FOR 1907-8 has just been prepared and copies or other information may be had on application to Mr. Détriché's sole representative for the United States and Canada:

JACKSON & PERKINS CO.

Newark, New York

North Carolina Natural Peach Pits

You always have a stand of healthy seedlings when you plant North Carolina Naturals. Orders will be booked now and filled in order booked. Let me hear from you with estimate of wants and I will make prices right.

Reference Bradstreet

Address John A. Young

Greensboro Nurseries

GREENSBORO, N. C.

QUALITY

Quality and quantity don't always go well together; but they do with us because we know how. For the season of 1908 and 1909 we offer Budded and Grafted Pecans, Leconte and Kieffer Pear, Hardy Oranges, Plum, Persimmon, Fig, Mulberries, etc. A full line of Shade Trees and Ornamentals.

CORRESPONDENCE SOLICITED

Arcadia Nurseries, Monticello, Fla.

QUANTITY

SEEDLESS APPLE IN CANADA

(Continued from page 12)

able mold-like accumulation. They also gave well developed seeds, though fewer than the normal apple. As to size, the specimens seen by us were about equal to our Fameuse, or Snow, and those tested for quality and flavor were about equal to Ben Davis. We believe that our inspection warrants the advice that trees of this apple should only be purchased as a curiosity."

Having procured some specimens of the Spencer Seedless apple, I took a full description of the fruit on my return from Toronto.

The following is the description made: "Spencer Seedless Apple.—Medium in size; oblate to roundish, flattened at ends, somewhat angular; cavity deep, medium width, russeted; stem short, slender; basin very open, medium depth, slightly wrinkled with five fleshy, rounded masses where sepals or petals were; calyx absent, a wide opening extends to the core; color greenish-yellow, well washed with orange red and splashed with purplish red, though not prominently; dots numerous, yellow, conspicuous; skin moderately thick, tender; flesh yellowish, firm, inclined to woody, moderately juicy; core small, closed. There are really two cores, one above the other; mildly subacid, little flavor; quality medium, about like Ben Davis; season probably mid to late winter.

Seeds are not always absent, from one to two being sometimes found. While the core is smaller than that of the average apple there is still enough to necessitate coring, and the open cavity having an unattractive mould-like accumulation necessitates cutting this part out, which would offset any saving in the size of the core."

The Spencer Seedless Apple Company have sent two trees of this variety to be tested at the Central Experimental Farm.

Unless a seedless apple is as good or better than a McIntosh, Northern Spy, King or Esopus Spitzenburg, it is of little practical value in my judgment, unless for evaporating or canning, and as so many culls and windfalls of well known varieties can be obtained for this purpose we do not believe that seedless apples unless of great merit will become popular or useful. It is possible that by crossing seedless apples with varieties of the best quality that something will be produced that will be of real commercial value.

TREES AND PRICES

The Horticulturist has refrained from accepting orders for advertising from nurserymen who insist on publishing prices in

their advertisements, for the reason that the price at which good trees can be grown has been undermined by growers who use cheap unskilled labor and inferior methods, putting on the market trees very low in cost but which in reality are too dear for planters were they accepted as a gift. There is no necessity for paying exorbitant prices for trees. As a rule the different classes and varieties range from 20 to 50 cents each unless in large lots when discounts are made. The worst kind of a swindle is to sell a tree below cost to produce it, based on the skill put into a good nursery, and afterwards find that such tree has been disappointing. Inadvertently one of these ads. got into our paper last month unbeknown to the publisher until it was too late. Those who go shopping after the 5-cent trees will, perhaps, get what they pay for and no more. If you want good trees, pay what they are worth.

NUT NOTES.

A Texas nurseryman comes to the front with a dwarf pecan tree. There are various reasons why such a tree will prove popular.

The seventh annual convention of the National Nut Growers' Association is booked for Chattanooga, Tenn. The date will probably be the latter part of October.

The National Nut Growers' Association has four members on the National Council of Horticulture. Only two of these, however, are representatives of the Association, the others being delegates from other horticultural societies.

There are in the United States about twenty-five kinds of nut-bearing trees which are notable for their beauty as well as for their valuable products, not only of food, but of the high priced timber they furnish as well.

The consumption of nuts is increasing rapidly, as is evidenced by the large and regular increase of importations. The demand for nuts and nut products is evidently growing much faster than the home supply is increased.

The summer meeting of the Gulf Coast nut growers will be held at Monticello, Fla., May 19th and 20th. It will be attended largely by growers from Alabama, Florida and Georgia, with representatives from other sections.

Dr. Van Duzee of Minnesota, said at the last convention of the National Nut Growers' Association, "The growing of nut trees is a business which responds to intelligent effort in exact measure with the amount of brains and energy employed, and is also as ready to prove unsatisfactory if same are not forthcoming. Rightly managed and vigorously followed, I believe it offers greater possibilities of success and more sure reward than any other business with which I am familiar."

PROGRAMME COMPLETE

(Continued from page 3)

RAILROAD RATES

The railroads after long consideration finally declined, under date of April 29th, to grant the usual reduced fares on the certificate plan and suggested

"That your people be referred to the summer tourist fares which will be in effect to Milwaukee at the time of your meeting. Full details of the summer tourist fares may be obtained upon application to the representatives of the several lines."

SPECIAL COACHES AND PARLOR CARS

Chicago to Milwaukee

Arrangements have been made with the Chicago, Milwaukee & St. Paul Railway for special coaches and parlor cars on train leaving Chicago from Union Passenger Station, Canal and Adams St. at 11:30 a. m., June 9th, arriving at Milwaukee at 1:30 p. m. For those who wish to remain in Chicago for luncheon there will be special coaches and parlor cars on train leaving at 1:50 p. m., arriving at Milwaukee at 3:50 p. m.

Members should purchase tickets reading via. Chicago, Milwaukee & St. Paul Railway from Chicago to Milwaukee and return.

Passengers holding through tickets and arriving at Chicago on lines not entering Union Passenger Station will be transferred in rubber tired omnibuses free of charge.

Advise C. N. Souther, Gen. Agt. Pass'r Dept. C. M. & St. P. Ry., 315 Marquette Bldg., what train you will leave Chicago on and also the number of your party.

FOR STOP-OVER IN CHICAGO

Mr. Benjamin E. Gage, of the Chicago committee, advises that good arrangements have been made with the Great Northern Hotel for accommodations for members who may wish to stop over in Chicago on their way to the convention. This hotel is centrally located and near the Union Depot and good rates are assured.

ANNOUNCEMENT

Commencing with the first day of June of this year, we are the American Agents for the firm of:

Levavasseur & Fils of Ussy, France.

Their prices will be in full competition with those of other reputable Growers. Be pleased to reserve a liberal share of your orders for our friends.

Respectfully,

August Rölker & Sons

New York] P. O. Box 752, or 31 Barclay Street



SCENE IN THE NURSERY OF BOBBINK & ATKINS, RUTERFORD, N. J.

Mahaleb Stocks Winfield Grown

We are one of the largest growers of this stock in the world

Mahaleb Ground and Mahaleb Growers is the reputation we have won from parties who have both visited our plant and used our stock.

Growing Mahaleb Stocks

Mahaleb must be grown in land that will produce nice straight stocks and yet well branched roots. Climate must be such as will allow stocks to thoroughly ripen before digging, in order to get good thrifty stocks which are much easier to bud when transplanted.

FOR FALL 1908 OR SPRING 1909 We shall offer to the trade Mahaleb Stocks at the market price grown and handled as above described. **THEY WILL PLEASE YOU.**

BECAUSE

Our stocks can be budded late in the season, which insures a good stand of buds.
You can be sure of a perfect stand of stocks.
Our stocks produce an exceptionally fine root system.

Oregon

February 11, 1908.

The 4000 Mahaleb here in fine condition and are excellent stocks. I am very much pleased with them.

California

July 29, 1907.

The Mahaleb stock purchased of Cooper & Moncrief gave entire satisfaction.

NOTE: Order was received September 6, 1907 for Winfield grown stocks at 50c per thousand above import stocks from above firm.

Grading and Packing

Mahaleb must be graded closely if a good block of Cherry Trees is expected as a product from the plant of stock. Then properly packed in good paper lined boxes, which will insure their arrival in first class condition,

Indiana

February 10, 1908.

Your Kansas stocks came in good shape, graded very nice indeed, while another shipment from ——— has arrived and runs 30 to 40 per cent. under grade and in very dry condition.

NOTE: — These parties have planted over one-half million of our Mahaleb stocks in the past three years.

We have received many compliments of our stocks shipped this season and no objections, though we have shipped over two million stocks to almost every state in the Union.

Write for Prices on Early Orders—State Number Wanted

THE WINFIELD NURSERY CO.

Winfield, Kansas

Topic for Discussion.

The following correspondence regarding topic for discussion at the convention is of interest:

ROCHESTER, N. Y., May 16.

J. W. Hill, President,

American Association of Nurserymen,

Des Moines, Ia.:

Dear Mr. Hill—Has it ever occurred to you that it would be quite interesting to the large number of retail nurserymen who are doing business through agents, and who are members of the American Association of Nurserymen, that one or two good papers or a discussion on matters that appertain strictly to the retail nursery business might be interesting to such members of the association?

I for one, would like very much to hear some interesting talks on this phase of the nursery business. I don't think it is necessary for any one of the leading nurserymen to give up any of their state secrets as to the best method of employing salesmen, etc., but it seems to me that there are many subjects that might be brought up that would be of interest to the retail nurserymen. What do you think about it?

Yours very truly,

E. S. OSBORNE,

Treasurer Charlton Nursery Co.

A Word From Emery Albertson.

The following letter will be of interest to Mr. Albertson's many friends in the American Association:

LONG BEACH, Cal., May 19.

Editor AMERICAN FRUITS:

Enclosed I hand you postal order for \$1. Please send me American Fruits as long as this will last, and possibly by that time I may find another \$1. While I am now out of the nursery business, and am so far away, I will probably not be able to attend the conventions for some time—a pleasure I assure you I regret to lose. I am still interested in the work of the convention and always glad to hear through

the paper or otherwise of the work going on, and how my many good friends are getting along. I have missed the nursery papers very much, having only seen one or two copies in six months, but as the above will be my address for some time, and possibly permanently, I hope to see them oftener. Let my subscription begin with the April number.

I have a young orange grove, so you see I am still interested in fruit. We like this place very much and all have much better health than for years—no need for doctors since coming here. Hoping all goes well with you,

Yours truly,

EMERY ALBERTSON.



SPECIOSA CATALPA SEEDLINGS

Growing in the Nurseries of The Winfield Nursery Co., Winfield, Kans.

When writing to advertiser please mention AMERICAN FRUITS

Treatment of Damping-Off in Coniferous Seedlings

(Continued from page 7)

and it is believed to be one of the mixtures tested which may prove of value commercially.

Solutions Used.

Potassium Sulphid and Permanganate.

—A solution of potassium sulphid, made at the rate of 1 ounce of dry chemical to 1 gallon of water and applied to the soil before sowing the seed, gave no definite results because of the absence of the disease in the experimental plots. This was also true of a solution of potassium permanganate, mixed at the rate of 1 gram of chemical to 1 gallon of water and similarly applied.

Formalin.—Commercial 40 per cent. formalin, used at the rate of 4 ounces to 3 gallons of water, when applied to the soil before seeding and not afterward repeated, seemed to have no effect whatever upon the disease. The check plot, indeed, was much better, as were all of the other plots, both treated and untreated, located in that section of the nursery. When applied as stated and repeated after the seedlings had come up, the results were poor. It is now believed that formalin is of little value with the damping-off diseases of coniferous seedlings unless supplemented after the germination of the seed with some other efficient chemical. The results were disappointing when compared with those obtained with some of the other chemicals.

Sulphuric Acid.—The best results were obtained with weak solutions of sulphuric acid. A solution mixed at the rate of 1 ounce of acid to 1 gallon of water was applied to the soil several days before sowing the seed, until it was thoroughly drenched, and the treatment was repeated about a week after the seedlings came up. The treated plot was in excellent condition in December; there was a very good stand of fine, healthy seedlings and the soil was entirely free from algae and moss. The check plot, on the other hand, had practically no seedlings left, and the soil was green with algae and moss.

This solution of sulphuric acid was applied to young seedlings of a number of different species, and but one showed any ill effects. This was Norway spruce (*Picea excelsa*). It is not advisable to use an acid solution as strong as this upon the plants. Kraemer^b has shown that a solution of sulphuric acid at the rate of 1 to 500 is as strong as should generally be used upon plant tissues, and this is recommended rather than the much stronger one used in these experiments. For soil treatment the stronger solution will probably prove preferable.

A Case in Point

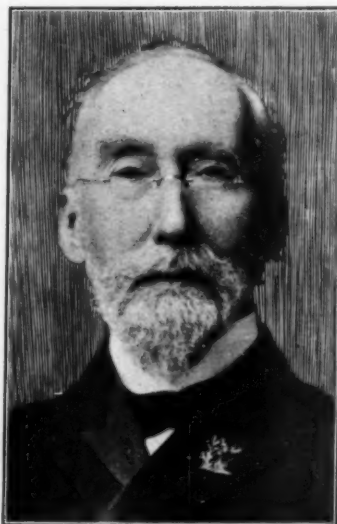
(Continued from page 5)

they may be in the highest branches of the tree, where a squirrel could hardly reach them. That necessitates the cutting of a large limb, and with so much cutting the tree is seriously injured and weak spots are left, where more spores enter. The canker may work down inside the bark for two feet before it shows itself on the outside, and it can easily be seen that treating in this way is impossible."

When the disease was first discovered the experiment of spraying the trees with

Bordeaux mixture was made without satisfactory results. The disease was found not in the leaves but in the bark. Dr. Murrill says that in the case of a very beautiful shade tree which the owner desires to preserve as long as possible, it might be well to treat it by cutting away the affected parts, and spraying the rest; its life might be preserved some little time, he thinks, but there is no permanent remedy, and the best advice as to chestnut trees generally is to cut them immediately for the timber, which is valuable. The canker is a parasite on a live tree and as soon as it has killed the trees, the other kind of fungus which lives on the dead wood begins to grow and the timber is ruined.

The canker was discovered in the chestnut trees in the Zoological Gardens in 1905 by H. W. Merkel, the forester, and upon search it was found in the trees of the Botanical Garden. The fungus shows in minute dots on the outside of the bark which sounds hollow when tapped. The affected parts gradually die and the fungus encircles the branches and trunk, and it is said that it will kill a tree with a trunk.



W. F. HEIKES, of Alabama

Who Will Address the Convention on "List of Desirable Fruits for My State and are Recommended to the Planter"

two feet in diameter in two years. Every form of chestnut tree is subject to infection—the European chestnut, the American, and the chinquapin. All these kinds of chestnut trees have been inoculated, but the foresters have found that other varieties of trees, including oaks and maples, are immune. Dr. Murrill says the territory now covered by the diseased trees is Long Island as far as Huntington, up through New York to Poughkeepsie, north to Connecticut and Massachusetts and south to Newark, Trenton, and Philadelphia. The fungus is spreading rapidly and this authority declares that man can do absolutely nothing to stop it. Experiments are going forward continuously, but the scientists are hopeless and are not only urging owners of chestnut trees to cut them and save the timber but to reforest the land without the slightest delay.

Did you hear about the pocket Directory? See Editorial page.

Discovers Parasites That Prey on the Fruit Fly and Mealy Bug.

San Francisco, May 22.—After a remarkable quest in the Far East for natural enemies of pests that infest American orchards, George Compere, entomologist, arrived here on the liner China last night successful. He left in Western Australia a parasite that was reducing the ravages of the fruit fly to a noticeable degree. This parasite was discovered five years ago in India, but previous attempts to introduce it into Australia failed on account of the opposite seasons. By putting the bugs to sleep in India with ice, Compere got 100,000 of them to Australia alive. He woke them up in the Australian winter. The parasites, apparently thinking they were still in India, went to work with a will. Three generations of native-born bugs saw the light before Compere left the Antipodes.

He also took to Australia a parasite which swept away like fire the cabbage aphid. Mr. Compere has brought to California a parasite to destroy the mealy bug, a pest that causes great grief to the orange grower. He discovered this friendly bug in Japan.

Some Opinions on the National Inspection Law

Yes, we want a uniform National Law, but how to bring it about is too much of a proposition for us to tackle. The one great objection we have to the inspection laws as they now exist, is that each state requires a different proceeding in the inspection and handling of nursery stock with the result, as you know, that it keeps the nurserymen who ship into several states constantly on the watch and in hot water to carry out the various requirements. If we had a uniform national law, it would certainly be much better.

A National Inspection Law would, of course, be desirable, provided the Federal government would furnish means to execute it, but from my experience on the Legislative Committee, I am satisfied that so long as Speaker Cannon is at the head of the lower house, not a single dollar of appropriation can be obtained for this purpose. I am so strongly convinced of this that I deem it idle to waste either time or money in the attempt.

Nearly every state has laws in relation to that, and the only National Law I could suggest that any state that has inspection laws, and the trees are inspected by a competent man, they ought to be admissible to every other state. The hoped of plan of some nurseries to control the laws of the state in their favor, so that their state trees alone are valid, is not fair. I think there is a good deal of the pig in some laws as well as in some men, but it can be made to let all live in comfort.

For the sake of uniformity which promotes convenience, I would like to see a National Inspection Law. On the other hand, we cannot take away from any state its right to protect itself, so I believe we ought to have a National Law to be applied just as far as it is right for it to go.

Yes, we favor a National Inspection Law, because then we would know what was required of us and we would not be subject to the ignorant, one-sided whims of two by four inspectors.

According to a special cable to the Chicago Daily News dated January 31st, the Swedish academy of agriculture has petitioned the government to grant a general permission for the free importation of American gooseberry plants, those in Sweden having been killed by a local disease. The matter was investigated by Chief Gardener Dahl, who went to America in 1907, and the petition is the result of the report made by him.

Heikes-Huntsville-Trees



HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

For the Fall of 1908 and Spring of 1909 we offer

**Pears, Plums, Cherries, Peaches,
Roses, Pecans, Figs, Japanese Per-
simmons and Magnolia Grandifolia**
In Large Quantities as Usual

Something New

A Root-Graft Wrapping Machine, invented by W. H. Bell, the superintendent of these nurseries. It does the work perfectly and will be on exhibition at the Nurserymen's Convention at Milwaukee.

See Our Price List for Particulars

Address **W. F. HEIKES, Mgr., Huntsville, Ala.**

VINCENNES NURSERIES

W. C. REED, Prop.

Vincennes, Ind.

Cherry

We are pleased to announce that we will have our usual supply of Cherry one and two year that promise very fine.

While we grow Cherry in larger quantities than any other Stock, we also have a very complete line of the following:

Apple, Standard Pear, Plum, Peach, Roses, and
Shade Trees, etc.

CAR LOAD LOTS A SPECIALTY

R. C. PETERS & SONS

Ironshire, Maryland

(SUCCESSORS TO)

W. M. Peters' Sons, Snow Hill, Md.

Bell Telephone connections in Office.

Telegraph Office, Berlin, Md.

OFFER FOR SPRING 1908

Peach and Apple Trees, all the Leading Varieties.
California Privet and Grape Vines.

Send in your List of Wants for Special Prices

French Nursery Stocks

Fruit Tree Seedlings and Ornamentals

Pear, Apple, Plum and Cherry and Angers Quince Cuttings grown for the American trade.

Pear and Crab Apple Seeds.

Most complete assortment of Ornamental Stocks, Trees and Shrubs.

Dutch bulbs—Gladioli.

Orders solicited and booked now at low rates.

E. T. DICKINSON

Chatenay, Seine, France

GEO. E. DICKINSON, 1 Broadway, New York

Goossens & Hellemons

OUDENBOSCH, HOLLAND

Growers of hardy Ornamentals, Forest and Avenue Trees, Conifers, Evergreens and Shrubs. Supply in A 1 Quality only.

For New Trade List Apply to the
AMERICAN AGENTS

August Rölker & Sons

New York, P. O. Box 752, or 31 Barclay Street

THE

L. Green & Son Co.

Perry, Lake Co., Ohio

Offer for Fall 1907 and Spring 1908

One of the most complete assortments in the country. Heavy on Standard and Dwarf Pear, European, Japan and Native Plum, Peach, Ornamental Trees, fine lot of Poplar including 1 year Whips, lots of Shrubs, Vines, Roses, Evergreens, Herbaceous and Perennial Plants.

Also nice lot 1 year Grapes that promise to be good stuff.

CORRESPONDENCE SOLICITED

INSPECTION INVITED

TREES

Fruit, Shade and Ornamental Trees, Evergreens, Roses, Shrubs, Etc.

Wholesale and retail.

Long list of varieties suitable to all sections.

Full line for Spring, 1908.

Dealers trade a specialty.

Peach Seed, California Privet.

Send Us Your List of Wants for Prices.

Franklin Davis Nursery Co.

BALTIMORE, MD.

CHARLES M. PETERS

Formerly of W. M. Peters' Sons,

Grape Vines a Specialty

My soil I find specially adapted to making plenty of fibrous roots and plenty of vine. A trial order will convince you that my grading, quality and price will be satisfactory. It is now my intention to make the growing of Grape Vines a specialty. Correspondence solicited.

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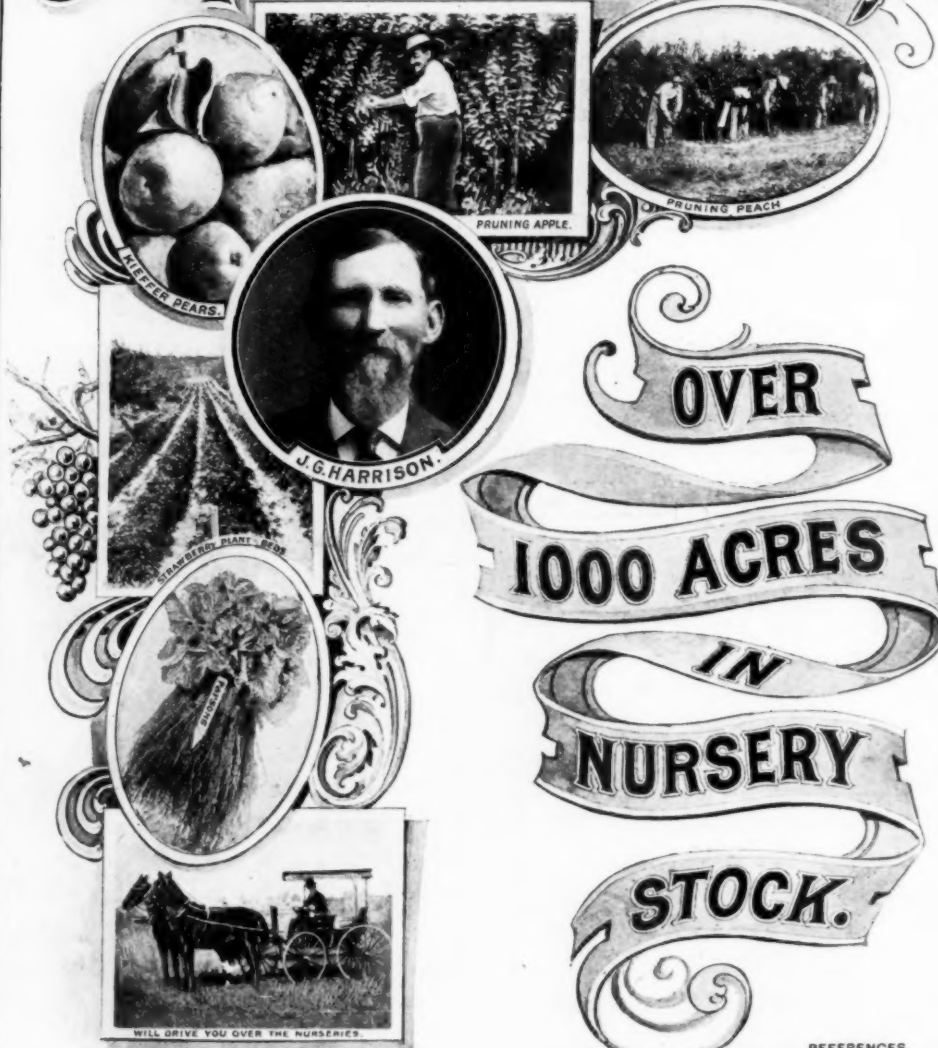
Our representative, Orlando Harrison, will be at the convention in Milwaukee, June 10th, and tell you if there are any trees left.

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5-8, 3-4, 1 1-4 Inch

BUDDED APPLE---Select Stock, Two Year
Over Fifty Varities

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REFERENCES.
EXCHANGE AND SAVINGS BANK OF
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PEACH---One year from bud on new land---PEACH
Over 100 Varities

CHERRY---One year and two year---CHERRY

PLUM---One year and two year---PLUM

BUDS READY JULY 1st